THE
MEDICAL AND SURGICAL
REPORTER.

No. 1972. DECEMBER 22, 1894. Vol. LXXI—No. 25

ORIGINAL ARTICLES.

FOREIGN BODIES IN THE EYEBALL, WITH REPORT OF CLINICAL CASES.

J. HOBART EGBERT,* A.M., M.D., PH.D., HOLYOKE, MASS.

Many penetrating wounds of the eyeball are accompanied by the lodgment of a foreign body within the interior of the globe. Foreign bodies within the eyeball give rise to most serious complications, frequently determining the loss of the wounded organ and tending to induce sympathetic inflammation in the uninjured eye. They may be of various characters—bits of steel, iron, stone, glass, shot and the like being commonly met with. Foreign bodies which do not involve the vitreous chamber or implicate the ciliary processes may usually be removed by proper surgical methods and the eye saved. A foreign body lying upon or imbedded in the iris may be removed by excising the portion of iris containing it (iridectomy); a body loose in the anterior chamber may be removed by paracentesis of the aqueous or by a pair of fine forceps introduced through a corneal incision; while a body lodged in the lens may be removed by extraction of the lens—which latter is sure to become cataractous or, in young persons, to undergo solution by virtue of the injury. Foreign bodies which penetrate the cornea and lodge in the iris are likely to occasion purulent inflammation of that membrane, which inflammation may become by extension a highly dangerous iridocyclitis. The following case gives extensive illustration of this class of injuries:

CASE I.—Mr. Alfred Christian, aged twenty-five, was the victim of a mine explosion early in the fall of 1892. Besides several more or less extensive bodily injuries, his eyes and upper portion of face were filled with small fragments of stone. He did not come under the writer's care until about three weeks after the accident. All foreign particles were first removed from the corneæ, a foreign-body needle and spud being used for this purpose. These particles had already occasioned considerable corneal irritation and even ulceration. There was suppurative iritis in the right eye, which had poured out a quantity of pus into the anterior chamber. This was evacuated by paracentesis. The lens of the right eye was not involved. The cornea and sclerotica of the left eye also held numerous particles of stone; a single fragment was lodged in the superior external quadrant of the iris and another in the lens, which latter was displaced. As soon as the cornea of this eye had gained sufficient integrity an iridectomy was made, which served both to remove the particle of stone imbedded in the iris and as a measure preparatory to the extraction of the injured and dislocated lens. The iris of the right eye was destroyed by the traumatic purulent inflammation which, as already stated, was well advanced when the patient applied to us for treatment.

*Chief Surgeon Hampshire Eye and Ear Infirmary; formerly Dean St. Louis Ophthalmic and Aural Institute, St. Louis, Mo.; author "Enucleation of the Eyeball: When and How to Operate," etc.

During the entire course of treatment, with the exception of the last week, the patient was kept quietly in bed, while the strictest antiseptic precautions were at all times observed. The eyes were bathed every morning and evening with a weak, lukewarm bichloride solution (1 part to 8,000), and after each bathing a fresh dressing of five per cent. iodoform gauze, upon which a small quantity of boric-acid ointment was usually spread, was bound over them by a double bandage. When discharged from our care the patient had fair vision in both eyes.

Thus we see that even a number of small foreign bodies in and about the anterior chamber of the eye may, when properly treated, be recovered from with resulting good vision; but with the vitreous chamber and its surrounding tunics the conditions are changed. Whenever a foreign particle finds its way into the vitreous an exceedingly serious case is presented; while if the ciliary region of the eye has been implicated by the injury the severity of the case is still more increased. While it is certainly true that injuries of the eye are momentous in proportion as they affect the vision of the eye injured, still they are doubly so in proportion as they tend to produce sympathetic conditions in the uninjured eye. Wounds accompanied by the entrance of a foreign body within the eyeball not only frequently destroy vision, but are prone to induce sympathetic ophthalmia; nevertheless, under certain favorable conditions these bodies may be removed, the eye saved and serious sympathetic conditions avoided.

The body entering the eye from before pierces the cornea or sclerotica, and passing through the lens or tunics beneath the sclerotica, may traverse the vitreous and lodge itself in the fundus of the eyeball; or, as is sometimes the case, having spent its force it falls to the floor of the vitreous chamber, perhaps rebounding from the posterior wall. The first consideration is as to whether the body can be seen, and the second whether or not it is of steel or iron and therefore magnetic. The ophthalmoscope is applied to the locating of these bodies, but as profuse hemorrhage often attends their entrance, the chambers of the eye are not infrequently filled with blood, so that the fundus cannot be properly examined. Under these circumstances, if there are no symptoms of inflammation, it is allowable to keep the patient quietly in bed for a few days to see if the blood will not be absorbed and thus permit an examination of the fundus and possible location of the body by means of the ophthalmoscope. In all such cases, however, the patient must be carefully watched by the surgeon, who must hold himself in readiness either to search for the body or to enucleate the eyeball as soon as inflammatory symptoms present themselves, manifested by pain, marked tenderness over the ciliary region and softening of the globe. When these conditions are present, if the body cannot be found and removed by an exploratory operation, the injured organ should be at once removed and sympathetic ophthalmia thus avoided. The writer is not aware of any authenticated case in which sympathetic ophthalmia ever attacked an eye after its injured companion had been removed—the uninjured eye being unaffected at the time of the removal of the other. Moreover, sympathetic *irritation* usually disappears upon enucleation of the offending member; but if the disease has once fairly broken out, the prognosis of sympathetic ophthalmia from any cause is most unfavorable, and even the immediate excision of the eye primarily affected at this stage of the trouble generally fails to have any, or only a temporary, beneficial effect. Realizing the ominous import of sympathetic ophthalmia, the surgeon, as well as the patient, should be ever watchful for its well-marked approach and proceed at once to active measures as soon as its dangers threaten.

A word concerning the methods now employed for removing foreign bodies from the vitreous chamber. For the removal of steel and other magnetic particles a specially designed magnet is the most useful appliance: the forceps, grooved hook and similar instruments have been employed but with doubtful success, and generally speaking the eye which incloses a foreign body is usually doomed. Still, a few cases of the successful removal of foreign particles from the vitreous, with restoration of vision, are recorded. Very rarely invading particles have become encapsulated and remained quiescent during long periods of time, but even in these cases they may be expected to ultimately occasion secondary

inflammation. Wolfe reported a case in the *Medical Times and Gazette*, January, 1876, of a minute particle of iron that had been struck off from a nail and entering the eyeball remained lodged in its tunics, close to the optic nerve, for almost eight years. The eye gradually became blind, but the foreign body remained quiescent for the length of time mentioned and then suddenly caused great irritation in the other eye. The injured eye was thereupon promptly removed and the irritation ceased.

The following cases illustrative of the general course and treatment of these conditions cannot fail to prove of interest:

CASE II.—On Wednesday, April 11th, a man thirty-five years of age applied at the hospital for treatment and gave the following brief history: A few hours before he had been cutting a heavy plate of metal with a chisel and hammer, when a bit of steel from the edge of the chisel flew off, striking him in the left eye. Upon examination of the eye it was found that the particle had passed through the sclerotica, just without the ciliary region on the temporal side, and thus entered the vitreous. There was sufficient blood in the eye to prevent examination of the fundus and location of the foreign body by means of the ophthalmoscope, and it was resolved to wait a short time to see if the blood would not soon be sufficiently absorbed to render possible an illumination of the fundus. Friday night, however—two days and a half after his admission to the hospital—pain was experienced in the eye; it presented a cloudy appearance and incipient inflammation was plainly announced. The fact that active measures must now be employed was communicated to the patient, and he was told that an attempt would be at once made to remove the offending particle, providing he would give his consent to having the eye removed in the course of the same operation if the body could not be found or successfully removed. He accepted the proposition and the following afternoon the operation was performed. The patient was etherized, the lids held apart by a speculum, and the opening made through the tunics of the eye by the entrance of the foreign body was dilated. A magnet devised by us for this purpose was now introduced through the opening and thrust about in the vitreous. This was repeated three times without removing the piece of steel. As a final trial the magnet was introduced but a short distance and made to sweep about the inner portion of the opening in the globe, and when withdrawn it brought with it the piece of steel, which had evidently been brushed off by the lips of the wound upon a previous withdrawal. Antiseptic precautions were, of course, rigidly observed throughout the operation. The opening in the sclerotica was united by means of a fine silk suture and the eye dressed antiseptically. The conditions began at once to improve. Before operation vision was reduced to perception of light; five hours after operation, $V=\frac{3}{200}$; forty-eight hours afterward, $V=\frac{5}{200}$; and at the end of the first week, $V=\frac{20}{200}$. After that the sight steadily improved and in due time the patient was discharged from the hospital with good sight in both eyes. It is true that the ultimate result of such cases cannot be foreseen, for eyes which have been thus injured by accident and operation are quite like those eyes which contain latent foreign bodies, in that they may some day cause trouble, even though it be years after the receipt of the injury.

The following case, while less fortunate in its results than the preceding one, presents only too truly the general outcome of the class of injuries we are considering:

CASE III.—Saturday morning, August 13, 1892, a young machinist's apprentice, twenty-two years of age, was boring with a fine drill a piece of steel, when the drill broke and threw a small fragment of itself into the right eye of the operator. The drill was revolving at a high speed when the fracture occurred, and the fragment was hurled with considerable force. The patient came under the writer's observation about 2 P.M. the same day. Simple inspection showed that the particle of steel had pierced the eyeball just within the sclero-corneal junction in the lower segment of cornea and had passed, evidently revolving the while, through the outer tunics of the eyeball, through the iris and through the margin of the lens. The ophthalmoscope revealed a clot of blood in the posterior chamber resulting from the wound in the iris, and a haziness of vitreous caused by blood in the vicinity of the optic disk. The body could not be seen. The prognosis for the eye was most unfa-

vorable. The patient was put to bed and enjoined to lie quietly on his back to await developments. During the afternoon and evening there was no considerable pain in the eye, but the next morning pain began and the following evening was constant and intense, showing that inflammation was imminent and enucleation of the wounded eyeball the only issue. On account of the severity of the pain the patient did not greatly object to the operation, and early Monday morning—less than forty-eight hours after the receipt of the injury—the wounded eyeball was removed and the bit of steel found, not in the vitreous chamber, but imbedded in the tissues of the orbit behind the globe.

Foreign bodies which have entered the vitreous chamber are thus seen to be exceedingly portentous, not only frequently causing sightless eyes, but tending to induce sympathetic ophthalmia; and these accidents have furnished and will still furnish numerous eyes for enucleation.

PUERPERAL PHLEBITIS.*

BARTON COOKE HIRST, M.D., PHILADELPHIA.

Of all the forms that sepsis can present in a woman after labor, phlebitis, I should say from experience in consulting practice, is least understood, most often mistaken for something else and most frequently maltreated by the general physician. And yet there is no form of sepsis that has so many distinctive and peculiar characteristics if they are known and looked for. The most misleading features in the disease, from a diagnostic point of view, are the late appearance of symptoms and the entire absence of local physical signs of inflammation. I have known a septic phlebitis develop as late as five weeks after labor, and in all cases uncomplicated by other forms of septic inflammation the womb involutes well, is freely movable and insensitive; the broad ligaments with the uterine adnexa are apparently normal, while the general symptoms of high fever, rapid pulse, profound prostration and metastatic developments may be most marked. It is this absence of local symptoms that strengthens the indisposition in us all to admit sepsis as the cause of disease in our patients after childbirth.

Symptoms.—A typical clinical picture of puerperal phlebitis presents the following characteristics: Evidence of disease appears ten days or more after confinement; there may have been a slight evening rise of temperature from the beginning of the puerperium, and during this time the patient may have appeared somewhat restless or anxious with a flush on one or both cheeks; the pulse also may have been somewhat accelerated, but there is scarcely enough in the woman's condition to attract her physician's attention. After a varying but considerable length of time, with the premonitory symptoms just described or with none at all, the temperature rises high in twenty-four or forty-eight hours, a chill sometimes but not usually preceding the fever. The pulse is rapid out of all proportion to the temperature, there is a dusky flush on the cheek or cheeks and patches of red may appear on other parts of the body, particularly on the chest. The tongue is very foul. The patient has an anxious, troubled, restless look, but if questioned may reply that she feels perfectly comfortable, or if she feels ill she cannot complain of any localized pain or discomfort. The abdomen is not distended nor is it usually at all sensitive to pressure. A vaginal examination is entirely negative. The disease once begun runs a most tedious course. I have attended two patients who were seriously ill, with high fever for four months, and I think the woman lucky whose illness is not protracted beyond three weeks. Another most distinctive feature in the course of the disease is the tendency to complete remission of the fever and of all other symptoms for more than a week perhaps; then there is a recurrence of high fever, rapid pulse and profound prostration—in short, a reappearance of all the old symptoms in their original intensity, but the relapse does not often last long. I have seen such a

*Read before the Philadelphia Obstetrical Society.

relapse recur three times in an individual who had been ill three months before the first remission.

Complications.—As is well known, the commonest complication of phlebitis is phlegmasia, but the latter is by no means a necessary consequence of the former. I have seen many a case run its course without a swelling in the leg or legs and a number of cases besides in which the phlegmasia was a transitory, scarcely noticeable phenomenon in the course of the disease. Phlegmasia is too large a subject to consider here, and I shall simply refer to some interesting features of it that have struck me in my own experience. I have the notes of sixteen cases seen in private, consulting and hospital practice. In two instances there was double phlegmasia. In one case the swelling first appeared seven weeks after childbirth. In two cases there was a combination of the cellulitic and of the thrombotic phlegmasia. In one case there was an abscess in the popliteal space; in another, in the calf of the leg. In several cases the phlegmasia began as a pure pressure thrombosis, but in all these cases the clot eventually became infected and there was some septic fever.

It is a fact not generally appreciated that the thrombosis of phlebitis in the puerperium is not necessarily confined to the veins of the pelvis and to those of the lower extremities. Large veins far distant from the seat of original infection may be affected. As an illustration, my friend Dr. Fussell has told me of a woman under his charge in whom the longitudinal sinus of the brain was found solidly blocked by a well-organized antemortem clot. She died four weeks after confinement, death being preceded by coma and convulsions.

Another well-known complication of septic phlebitis is a metastatic septic inflammation anywhere in the body. The brain, the eyeballs, the lungs, the pleura, the kidneys, the liver, the spleen, the subcutaneous connective tissue may be the seat of an abscess. I have seen in a puerpera the whole of one leg and a forearm riddled by the multiple abscesses of suppurative cellulitis.

Still another complication is profuse hemorrhage from the veins of the placental site. One of my students has recently told me of a case in which there were repeated alarming floodings in the course of a puerperal phlebitis, following attempts at intra-uterine disinfection.

Treatment.—The treatment of puerperal phlebitis is summed up in a short sentence: Abstention from local interference and the freest possible use of stimulants and food. Any attempt at intra-uterine disinfection will make the patient distinctly worse. There is imminent danger of causing metastases or hemorrhage by local interference. In one of my patients an intra-uterine douche was followed by a chill, and within twenty-four hours by suppurative pleurisy. In another the temperature rose to 106.8° after cleansing the uterine cavity. This indeed is a diagnostic feature of considerable value, and is occasionally the only way to distinguish between sapræmia and phlebitis, as the following clinical history proves: I saw in consultation a lady who had been delivered three weeks before. She had had a temperature of about 103° for two weeks; her pulse was rapid; there was profound prostration, and one of the most distinguished physical diagnosticians of Philadelphia had the day before detected an incipient septic pneumonia. The abdomen was flat and not tender. The uterus was well involuted and perfectly movable. There was a slight bloody discharge without odor. All this looked very much like phlebitis. I thoroughly disinfected the uterine cavity, however, and within twelve hours the temperature fell to normal, the signs of pneumonia disappeared and the patient made an uncomplicated recovery. Had this case been one of phlebitis, as it seemed to be, my local interference would have made the woman much worse. But in spite of this risk I always carry out one thorough disinfection of the womb, even in a case in which I feel pretty certain of the diagnosis of phlebitis. The clinical history just related is sufficient for such a rule of practice. Having established the diagnosis of phlebitis and having shown the futility of local disinfection, my routine treatment is as follows:

Milk, predigested if necessary, and predigested beef at regular intervals and in as great quantities as the patient can digest; whisky, as near a pint a day as she can stand; or, if necessary, champagne in larger quantities. Digitalis for the rapid pulse and quinine and iron by the bowel.

The patient is kept in bed for at least ten days after all symptoms disappear.

Prognosis.—In spite of alarming symptoms and long continuance, the disease should end in recovery in the vast majority of cases. I have only lost one of my cases of phlegmasia and two other cases of phlebitis, a mortality of about 10 per cent. Among the women who recovered were some as desperately ill as I ever saw, so that I approach a case of this kind with considerable confidence as to the result.

A PRACTICAL STUDY OF SERIOUS ABDOMINAL CONTUSIONS, WITH A CLINICAL REPORT OF TWENTY-ONE CASES.*

THOMAS H. MANLY, M.D., NEW YORK.

[CONTINUED FROM PAGE 824.]

TREATMENT—*continued.*

Michaux severely condemns exploratory incisions until the time arrives when symptoms of serious internal trouble are present. This is usually within twenty-four hours after the injury, but it is often a difficult matter to correctly determine (*Gaz. Fev.*, Mai Avril 12, 1892). Up to 1893 there were but 7 cases on record, according to this author, in which laparotomy had been performed successfully for rupture of the intestine following contusion of the abdomen; one each by Moty (*Bull. de la Soc. de Chir.*, January, 1890, No. 1, p. 48), Croft (Chir. Soc., London, March 14, 1890), Taboda (*Wien. kl. Woch.*, 1891, No. 45, p. 837), Michaux (*Bull. de la Soc. Chir.*, January 27, 1892), Ch. Nelaton (*Buil. de la Soc. Chir.*, October, 1892), Michaux (*Bull. et Mem. de la Soc. Chir.*, 1893), Bouffin (*Congrès Francais de Chirurgie*, 1893).

CONTUSION DE L'ABDOMEN INDICATIONS OPERATOIRE.

Moty, when reporting a case of mortal contusion of the abdomen in a boy who was kicked by a horse, comments on the many difficulties attendant on diagnosis in abdominal injuries. He declares that the proper course of conduct in this class of cases is not yet definitely determined, though the general rule at present which obtains among surgeons is to laparotomize when there are good grounds for suspecting intestinal perforation; but he nevertheless maintains that "when we are in doubt an exploratory incision is not permissible and the expectant or medical treatment should be the rule."

Mr. Stanley has reported two serious cases of abdominal injury, one recovering and one dying. No operation (27th vol. *Med.-Chirurg. Trans.*).

Chavasse collected 149 cases and noted that mortality in conservative treatment was about 30 per cent. ("*Contusion de l'Abdomen*," *Memoirs de l'Acad. de Med.*, January, 1872). In McKenzie's 111 cases with tentative measures the mortality was 6 per cent. In one of them the stomach was ruptured and in another was rupture of the spleen (*Med. Trans.*, vol. xiii, p. 207).

Krause, at the Anatomical Society of Paris, presented the report of a case of violence to the abdomen of a man in which the question of laparotomy had been raised. Patient died in eighteen hours, and on post-mortem examination it was found that the duodenum was ruptured and the abdomen badly contused. Dr. W. B. Corson (*Jour. Am. Med. Ass'n*, November 5, 1887) published the case of a boy who had been kicked on the abdomen by a horse. He was seen ten days later, when he was moribund. On autopsy a rupture of the ileum was discovered, with free escape of its contents into the peritoneal cavity. This author favored early incision when patient could safely bear it.

The same author cited Dr. J. Gregory's case of a boy who fell but four feet, striking his abdomen on the edge of a ladder. In six hours death followed. An extensive rupture of the ileum was found near the cæcal junction.

Joubert ("*Traité de Maladies Chirurgicales du Canal Intestinal*") while dwelling

*Read at the annual meeting of the New York State Medical Association, October 10, 1894.

on this topic says that direct compressive force against the vertebral bodies is the preponderating cause of intestinal rupture; and adds that the repair of such an opening is very frequently satisfactory and prompt by atresia of the damaged wall to its healthy neighbor.

Tillaux, while a strong advocate of abdominal section in appropriate cases, nevertheless dwells with considerable fullness on the remarkable tendency of the peritoneum to take on adhesive inflammation. He would immobilize the intestine and administer opium with a free hand.

Mr. Edmund Owen, in "St. Mary's Hospital Reports," gives an interesting summary of the case of a man who was injured by a fall on the abdomen. Was seen by him the morning after injury. He had peritonitis and symptoms of a ruptured intestine, but was in shock when seen. On the following day symptoms were aggravated. Now, with patient's concurrence, abdomen was opened and a large rent in the intestine found within six inches of the head of the colon. Patient rallied fairly well but sank about six hours after operation. Mr. Owen thought that an earlier section might have saved his life, and concludes that in cases of an extensive rupture of the bowel death is sure to result, while a timely operation offers the only hope of saving life.

In a considerable number of grave injuries of the abdomen, symptoms of intestinal extravasation occur only as secondary phenomena. The intestine has been severely contused, or perhaps only a limited area of its wall; gangrene or ulceration follows any time from three to ten days, and a fulminant type of peritonitis follows.

Probably in this class of cases when primary shock has been survived the best prospects of good results follow laparotomy. Judging from the accumulated reports of laparotomies necessitated by abdominal contusions, it must be admitted that the prospects of success following them are very discouraging, and that the cases which demand them are so depressed from a general collapse or a sinking of the vital powers that a major operation is generally succeeded by a fatal termination.

As may be conceived, the mechanical therapy of visceral traumatisms within the abdomen is not always very difficult. But the great impediments to its success are the terrible tendency to additional shock after the peritoneum is opened and the imperative necessity for celerity of manipulation. Besides, notwithstanding what may be said to be contrary, peritonitis invariably follows every time the cavity of this sensitive serous membrane is opened, constituting in itself a fresh element of danger to life.

We have it on the most unimpeachable testimony that alarming symptoms may follow an abdominal contusion without any palpable pathological changes whatever. In a case of this kind would it not be a calamitous step to open the abdomen in search of a phantom—perhaps kill our patient outright through fresh shock or light up a fatal peritonitis?

But laparotomy, serious as it must be viewed, in cases of abdominal contusions associated with intestinal rupture which have survived shock and in which its indications are clear, offers the only hope of preserving life and should be recommended. Let no tyro, however, undertake it. Better thousand times to leave the case to nature; for this operation to succeed at all requires special skill and experience, a most thorough preparation of the patient and his surroundings, attention to detail and intelligent after-treatment.

The latest which has come into my hands on the discussion of abdominal contusions is from the Surgical Society of Nancy. It appears in the form of an essay and discussion which are so pertinent and interesting that nearly a full transcription of it seems warranted.

Vautrin began by affirming that "neither the violence of a traumatism, nor the shock following the first few hours after injury, nor the appearance of rapidly developing peritonitis, enabled us to diagnose with certainty rupture of the intestine in abdominal contusions." He further added that "when there were indications pointing to intestinal rupture there was no symptom which pointed to the part of the alimentary canal involved." As a rule, peritonitis only made its appearance after an interval of calm after primary shock had passed off. He would advise that immediately after injury, when there were reliable indications of intestinal rupture, the abdomen should be opened and an exploration made. For,

properly performed, he thought it would not augment the risks; and besides, if any benefit were to follow operation it must be now or not at all.

He had recently observed two cases. One was a man 40 years old, a teamster, who had been violently crushed in the right flank. Some hours after injury he was brought to the hospital and seen by Vautrin. Laparotomy was performed. Next day general peritonitis was well marked; there was great pain, intense thirst, exhaustion and fæculent vomiting. By autopsy a rupture of the small intestine was discovered midway between the pylorus and the cæcum. Besides, there was a slight laceration of the right lobe of the liver. The peritoneal cavity was filled with blood and intestinal contents.

The second case was a young man of 23 who fell 3 meters from a ladder. He was seen the day following injury. There was then ballooning of the abdomen, but no severe pain except over the umbilicus. Slight nausea and retching; pulse 125, but regular; temperature 36 5° C. The next day he remained about the same, but abdominal meteorism was increased. Laparotomy was proposed, but the family refused. The same night alarming symptoms set in and he died at three in the morning. An autopsy was denied.

From these two unfortunate cases and other observations Vautrin believed that surgical intervention was rather to be preferred than expectation. It was true that a great risk was entailed when one operated under shock, yet he alleged that it offered the injured the only hope.

M. Weiss, in the discussion which followed, declared himself a partisan of early operation when anything like definite indications were present; still he alleged that diagnosis was attended with difficulty. He cited the case of a young woman who had been kicked by a horse, in whom it was at first supposed the intestine was wounded, but who after a few days' rest made a good recovery.

Regnier cited the case of a cannoneer who was accidentally crushed over the abdomen. He saw him 24 hours after the injury. At this time the pulse was small, the face pale and the abdomen flat. Internal hemorrhage was diagnosed. The patient refused operation and died on the third day. On autopsy an extensive laceration of the liver was found.

M. Heydenreich agreed that when we were assured that there was intestinal laceration of considerable extent laparotomy should be resorted to. But we are usually in ignorance of this until it is too late to interfere. Two cases of serious abdominal contusion had come under his care. In one a man of 40 years had been kicked by a horse. Peritonitis promptly followed and he sank on the second day. A post-mortem examination showed an extensive rupture of the small intestine. In another case a man of 44 years had sustained two kicks from a horse over the abdomen. A fulminant type of peritonitis followed, but after the fourth day it began to decline and he ultimately made a good recovery. He believed that it should be more generally known that laparotomy itself is attended with about 25 per cent. mortality under any circumstances. In these cases it greatly augmented the danger to life and few survived it. It was temerity to open the abdomen in all, and was not justifiable in any but rare instances.

M. Froelich declared that it all depended on the degree of peritoneal shock present what course one should pursue. He had seen Professor Goltz, at Strasbourg, instantly kill a large dog by a blow on the abdomen which left no trace of lesion discernible on post-mortem examination.

M. Gross (*Rev. de Chirurg.*, September, 1894) communicated six observations for contusion of the abdomen, with the following brief recapitulation.

First case. A young man was thrown from a carriage, the wheels passing over the umbilical region. Alarming symptoms on the first day; menaced by peritonitis for four days; amelioration commenced on the fifth day and recovery was complete in one month.

Second case. A youth of seventeen years fell from a loft, striking on the wheel of a carriage. Peritonitis. Death on the fourth day. No autopsy.

Third case. A man of thirty-two kicked by a horse over the liver. Symptoms of hepatic injury with acute peritonitis. He sank after two months' illness. On autopsy suppuration of the liver was found, with gangrene of the small intestine near the jejunum and complete obliteration of the superior mesenteric artery.

Fourth case. A man of sixty-two fell

on an iron arcade. Subacute peritonitis. Laparotomy twenty-four hours after injury. Blood and fæculant matter in the peritoneal cavity. Suture of ruptured intestine; closure of the peritoneum. Death in twelve hours.

Fifth case. A young man of eighteen fell and was run over by a carriage. Threatened peritonitis for fifteen hours. Rapid recovery.

Sixth case. A woman of thirty years knocked down by a runaway and crushed over the abdomen. Menaced by peritonitis for thirty-six hours. Return of symptoms on third day with symptoms of intestinal obstruction. Died on the fourth day. On autopsy intraperitoneal hernia with strangulation was found.

M. Gross summarizes these cases as follows:

There were four deaths. The great factor which adds to the gravity of complicated abdominal crushes is the visceral complication.

First. Operative medicine judiciously applied must be our main reliance in all severe cases.

Second. To derive any benefit from operation it must be instituted early.

Third. Unhappily, an accurate diagnosis is not always possible. The surgeon must often delay until the time is past for surgical relief.

Fourth. In doubtful cases it is better to delay than venture a laparotomy.

INTRAPERITONEAL HEMORRHAGE.

In cases of sudden exsanguination from intraperitoneal hemorrhage from abdominal crushing, should the peritoneal cavity be opened and its source sought for? On superficial reasoning one might say, Certainly; why not?

The late Dr. Chas. F. Parkes and others believed that by opening the peritoneum and admitting the atmosphere it favored the arrest of hemorrhage. But this is clearly an error, for such is not the case. When we appreciate the fact that great hemorrhage comes from the laceration of a solid viscus or the opening of a large blood-trunk, in which case to interfere is to destroy life; that the serous secretion of the peritoneum is alkaline and favors coagulation of the blood; that the source of hemorrhage is equally but firmly compressed on all sides, the degree of pressure being the greater the larger the escape, then it is more apparent that a laparotomy adds new dangers and interferes with nature's means of subduing bleeding. The utter futility of attempting to subdue the intra abdominal hemorrhage when large trunks within the abdomen are opened was recently illustrated in the case of the assassination of M. Carnot, when MM. Ollier and Poucet in vain tried to stem the tide which was springing from the cava, portal vein and hepatic artery.

Two cases of very large intra-abdominal hemorrhage came under my care last May (1894), one from a gunshot and one from a crush. Both were laparotomized. The blood torrent which issued through the incision in both when the peritoneum was opened was awful and could not be controlled. Both died on the operating-table. One, who had a ruptured spleen, might have been saved had he been treated on the expectant plan. Both, I am positive, would have survived much longer had they been left alone. When an opening is made and the blood is allowed to escape outward the loss or waste is irretrievable. But when pure aseptic blood is taken back into the economy there is a great gain. My experience and knowledge gained from a fairly practical acquaintance with these cases convince me that a laparotomy is not to be recommended in any type of hemorrhage succeeding abdominal contusion; that the chances of the patient are much enhanced by local and constitutional measures which do not imperil life.

INJURIES IN THE HYPOGASTRIUM AND INGUINAL REGIONS—VESICAL RUPTURE AND TRAUMATIC HERNIA: THEIR TREATMENT.

If the wall of the bladder be ruptured in the space of Retzius, the infiltrate into the cellular tissues will probably undergo resorption and the rent close of itself. But when the opening is through the fundus and penetrates the peritoneal coat, the danger of peritonitis is great and a laparotomy may be required to close in the breach.

Sir Wm. McCormick cites 16 cases of intraperitoneal rupture of the bladder from traumatisms. Six were operated on and saved ("Encyclop. Surg.," vol. vi., p. 327).

Mr. Reginald Harrison says that "when rupture of the bladder has extended into the peritoneal cavity, I can find no evidence to warrant the belief that life has ever been saved without surgical operation. When life has been saved it has been due to the aid of the surgeon" (*ibid.*, p. 327).

But vesical wounds heal with surprising rapidity, and I am not sure but the latter author has rather exaggerated the dangers of temporizing. My own practice would be to catheterize with great caution and watch for the onset of serious symptoms before instituting radical measures. The intestines fall snugly over the wall of the bladder; they may quickly become adherent to it and effectually confine the urine. The bladder being kept empty, no tension is placed on its wall and union is favored. Boracic or benzoic acid may be freely given by the mouth for their sedative and healing effects on the vesical mucous membrane.

If, however, there be great and constant pain in the hypogastrium, with marked constitutional irritation and vesical tenesmus, our diagnosis is positive and we may consider the propriety of a laparotomy, but not otherwise.

TRAUMATIC RUPTURES (HERNIÆ).

Guthrie, Pirrie and other authors allege that atrophic changes often occur in the muscles of the abdominal walls after contusive violence over any part of them. If this allegation can be supported, then it behooves us to endeavor to prevent such changes or modify their effects by appropriate treatment. In a considerable number of abdominal injuries which have come under my observation, no such sequelæ have been noted; nor can I find any mention of them in the works of many of the most celebrated authorities.

Kicks or crushes over the inguinal planes which are devoid of a complete muscular investment, one might assume might provoke such an extensive rupture of the aponeurotic fibers as would permit the intestine to slip through. It would seem reasonable to believe also that great compressive force over the parietes might so displace the viscera underneath that they would engage in or pass through the canals of emergence.

Aponeurotic fibrous structures, however, probably are as resistant to force as are the muscular, and hence are never extensively rent except when the organs invested by them are seriously damaged. We will sometimes have a patient who has an old hernia tell us that it was caused by a blow or fall in early life; at least, that he was not aware of its presence until after this event. In these instances the weight of opinion is that the evolution of the hernia was probably but a coincidence, or at most that a predisposition existed and the traumatism was but an exciting cause. There is no direct proof that local contusions over the abdomen will provoke hernia. Compression over the abdomen *en masse* certainly will not, as several cases which have come under my care demonstrate; such cases as result from buffer crushes, those cases in which heavily loaded vehicles have passed over the abdomen, and those in which the patient in a fall has struck with great force on the abdomen.

But if such injuries cannot be said to directly cause herniæ, they certainly do leave the contused over-strained muscles weak; so that when one rises he feels a dragging sensation in the back, the lax abdominal walls permitting of a sagging of the floating viscera and an undue tension of the mesentery which has its anchorage over the bodies of the lumbar vertebræ.

Now, a girth or broad belt will give great support and afford much comfort. It should be worn until tone is restored to the abdominal muscles, till their nutrition is improved and their functional vigor is regained. Heavy lifting and violent exercise should be eschewed for a considerable period; for a structure once seriously damaged on violent abuse is certain to manifest a diminished resistance.

[TO BE CONTINUED.]

Jinks' Fool Notion.

Winks—Did you ever notice that during hard times religious revivals always start up and the long-empty churches are sure to be filled?

Jinks—Yes.

"How do you account for it?"

"Salvation's free."—*New York Weekly.*

THERE is no use in talking any higher than we live.—*Ram's Horn.*

COMMUNICATIONS.

ACCIDENTAL AND CONCEALED HEMORRHAGE, WITH REPORT OF A CASE.

JOHN STROBEL, PH.G., M.D., PHILADELPHIA.

The so-called accidental hemorrhage, or that which occurs from premature detachment of the normally situated placenta, is not frequent and especially its grave form is rare. The hemorrhage may be open or concealed, or both forms may be present. In illustration I report the following case:

Mrs. S., aged thirty-eight years, multigravida, when at the end of the eighth month of pregnancy was suddenly seized with pain and severe hemorrhage from the uterus. I was immediately summoned, for the patient's condition was alarming. The blood flowed from the uterus to the amount of nearly a quart in a few minutes. The finger readily entered the uterus. The os uteri was dilated to the size of a silver dollar and was soft. The uterus was greatly distended. The pulse was very rapid and weak; the expression anxious; the body agitated with tremors and covered with cold sweat; pupils dilated; heart's action weak, irregular and beats intermittent; respiration shallow and hurried; very anæmic.

Treatment was whisky by the mouth and a hypodermic injection of sulphuric ether; the head of the bed was lowered by raising the foot; the vagina was washed out with hot bichloride solution (1:4,000) and tamponed with iodoform gauze. As soon as the patient began to rally the gauze was removed, the membranes ruptured and podalic version performed. The placenta was completely detached. With it there came away several very large clots, about the size of a fœtal head. The child was dead. Mother has made a good recovery.

TRANSLATIONS.

TYPHOID FEVER AND SECONDARY INFECTIOUS ERYTHEMAS.*

DR. L. GAILLARD, PARIS, FRANCE.

GENTLEMEN:

You observed in the Rostan ward a girl of seventeen years affected with a generalized and decidedly desquamative erythema. When you approached her bed she was lying upon her side, her face turned toward the wall, avoiding the light, silent, motionless and prostrate. And when, spoken to by me, she consented to change her position in bed, you noticed a swollen and puffed-up face whose skin was of a uniform redness and about to cast off a number of cuticular scales which were still slightly adherent.

On uncovering her you remarked the scarlet color of the whole surface of the body and the numerous flakes of skin which were easily detached by a touch of the finger-nail. This patient does not have the scarlet fever, for in this disease the desquamation does not coincide with the eruption, there being an interval between the two morbid acts. This case offers a beautiful example of scarlatiniform desquamative erythema. Should we say scarlatiniform? Assuredly, for the scarlet redness is absolutely diffuse, uniform and generalized, and for the moment there is no better term. But remark well, this false scarlatina which I have submitted to your examination only has

*A clinical lecture delivered at the Hopital Saint-Antoine. Translated from La Semaine Medicale, No. 56, 1894, by F. H. Pritchard. M.D.

deserved this term since yesterday. The day before yesterday you would have been quite justified in saying a generalized papular erythema, for then I was able to show you groups of confluent papules with which certain portions of the skin were spared, so that the primordial element of this eruption was not the scarlatinoid patch, but a papule. A day later you might even have called it a polymorphous erythema if there were not discernible here and there slight vesicles, bullæ and other irregularities of this exanthem. I am not one who rejects a precise terminology, especially in speaking of skin diseases, but in this particular instance we may disregard the modalities of the eruption. The prognosis is the special feature here. All the signs point toward a grave state for which the erythema might be called malignant or pernicious. Pathogenically, this eruption is the cutaneous manifestation of an infection, and this infection is secondary to typhoid fever if it be not a variation of the disease itself.

This girl indeed has had the typhoid fever, and it was only when she was becoming convalescent that this formidable complication burst forth. The history of her case is, in short, as follows: Affected with measles at the age of five, she had at two different times suppurating cervical lymphatic glands; at the age of fourteen she first menstruated. January, 1894, she came to Paris to work as a domestic. She had suffered for several days with pains in the ankles, with fever and a disordered stomach. July 23d she felt so weary that she was obliged to lie down before noon; headache, epistaxis, loathing of food, fever and all the symptoms of the beginning of a serious disease appeared. I believe that I am justified in regarding her as being at the seventh day of her typhoid attack when, on July 29th, she was entered brought to the hospital and placed under the care of my colleague, M. Ballet, whom I succeeded on the 1st of August.

When I first saw her on that day a diagnosis of typhoid fever was beyond a doubt· stupor, distention of the abdomen, dryness of the tongue and lips, rose spots, bronchitic râles at the bases of both lungs, with which the clinical picture was complete. The temperature, which until then had remained below 40° C., for the first time went down to 39.1°. August 2d, in spite of repeated sponging, her temperature in the evening reached 40.8°; cold baths were therefore indicated.

It is useless to dwell upon all the details of the evolution of the disease. With cold baths, intestinal antiseptics, especially lactic acid, and then benzo-naphthol, we arrived without incident at the twenty-third day of the disease, when an eschar was noticed on the left elbow, while a vivid redness of both buttocks was also discovered. The temperature still oscillated in the neighborhood of 39°.

The next evening upon coming out of the bath she had a prolonged chill and soon became livid; her feet were icy cold; the temperature by the vagina fell to 34°. We hastened to warm her, injected ether hypodermically, yet the collapse persisted until morning. On the 16th of August, the twenty-fifth day of the disease, her temperature was still very low, 35.6°; she suffered from vomiting of a greenish matter, meteorism, with an exquisite pain in the right iliac fossa, facies abdominalis, cyanosis, but no melæna. These symptoms led us to diagnose an acute peritonitis from perforation and to doubt the existence of intestinal hemorrhage. The prognosis appeared decidedly gloomy. I ordered an ice-bag applied to the abdomen, frappéd champagne and a little opium.

In the evening the temperature had risen to 38.2° and she began to grow warmer. During the days following the abdomen remained distended and painful, but the general condition improved and the temperature varied between 38° and 39.5°. On the 21st, the thirtieth day of the disease, we found an explanation of this persistent fever. Under the eschar of the left elbow a phlegmon had formed. Incision and drainage of the abscess caused the temperature to fall to nearly normal almost immediately. This done, a prompt recovery seemed to be hoped for; but in typhoid fever, as you know, one must always look for the unexpected. Now, on the 31st of August, the fortieth day of the disease, on removing the dressing of the elbow I noticed there a diffuse redness with a tendency to invade the greater portion of the upper extremity. As the day before we had substituted for the usual compresses wet with a solution of boric acid a dilute Van Swieten's solution, it was only natural to attribute the irritation to the sublimate, as I had observed the same condition to follow a salol dressing. I hastened to return to the inoffensive

boric solution, but the impulse had been given, and very rapidly the erythema gained the wrist and the root of the arm, while the papules also appeared upon the other arm, the buttocks, knees, the dorsa of the feet, then the groin, abdomen, neck, chest and face. It was not long before these papules became confluent, and in several portions of the epidermis fine vesicles appeared; on the hands small bullæ and on the soles of the feet large blebs filled with serum. At the same time the tongue began to clear up. To-day, the 9th of September, the erythema deserves to be called scarlatiniform and desquamative. I call your attention to the tumefaction of her face, the prostration, the lack of appetite and the presence of albumen in the urine. I would emphasize the gravity of the symptoms of infection and the malignancy of the disease.

One word upon the evolution of the fever. Since the 31st of August, when the first papules were noticed, the temperature has slowly risen. On the 1st of September in the evening it reached 38.4°; the next day 39.5°; the 3d 40.4°; and finally it reached 40° each evening, becoming somewhat lower in the morning. Yesterday, however, it did not reach 39.4°. The temperature is, in fact, the same as in an ordinary relapse. To recapitulate, we have observed:

1. A fever period of thirty days.
2. A period without fever of six days.
3. A slow ascent of the temperature with oscillations between 38° and 40°.

Internal treatment consists of tonics alone; internally she receives frappéd champagne, which she has drunk since the attack of acute peritonitis, and besides, coffee. Milk is offered her as often as she will take it. Externally a salve of borated vaseline with starch as a dusting powder is employed.

I have abstained from using any of the antiseptic remedies which the condition of infection would seem to demand, as there is not one of them which is not capable of aggravating the eruption and of producing erythemas of themselves.

Here the question is particularly delicate. I have mentioned both salol and sublimate dressings as giving rise to cutaneous irritation. Should we attribute all these symptoms to the dressing alone? Are we to admit a grave mercurial poisoning—a hydrargyria maligna—as we sometimes see in subjects with a peculiar sensibility to mercury? I do not hesitate to state that it is a mere coincidence. That the erythema has begun under and around the dressing is because it has a special predilection for irritated surfaces. Apply, for example, a mustard plaster to the back of a child who is about to break out with the chicken-pox, and you will see the vesicles form especially upon the irritated surface. The same holds true of other eruptions. Besides, I rely upon the evolution of the morbid phenomena in rejecting the hypothesis of a mercurial erythema.

An infectious erythema being admitted, how is it related to the foregoing typhoid fever? Must we regard it as a late symptom, an accident or a complication of the disease? Is Eberth's bacillus or other microbes to be blamed?

Before going into the bacteriology, let us examine the clinical side. You know, firstly, that this exanthem is by no means an ordinary symptom in the disease; it is indeed exceptional. Among the physicians whom you might consult on this subject several would confess their ignorance; others will say that they have observed it two or three times during a long practice; still others will state that they have long looked for but have never met with it. And if you open your books you will find but a meager number of observations.

The earliest is that of Forget (1843), which was of a scarlatiniform erythema appearing on the tenth day of the fever; then follow the cases of Mazeron (1866), Eichhorst (1875), Normand (1875), Murchison, Cottle, Reymond and Nélaton (1878). In 1880 Maurice Reynaud began to infuse a little order into the description of the eruptions of typhoid fever which he divided into early and late manifestations. Since this epoch there are works of Keromnès, Reynaud, Lemaigre, Lory, Moore, Hutinel and Martin de Gimard, Mussy, Legendre.

A perusal of this literature permits one to assert that besides the usual rose spots there are in this disease several varieties of erythema which may be considered from three points of view: the epoch of appearance, clinical physiognomy and gravity.

I. *Epoch of Appearance.*—Certain erythemas may precede the rose spots. They are called early and even premonitory, for

they have been called "rashes." In two of Wepham's cases they were scarlatiniform. Others are noticed after the first week and the rose spots in the second and third weeks. Still others are observed during convalescence, either with disappearance of the fever or after a few days of normal temperature. In relating the history of our case I have shown that the erythema constituted a sort of relapse, in which the process exhausted itself in the skin instead of Peyer's patches. Hence we may designate it a pseudo reversive erythema. Though with the eruption it is evident enough, I should not dare to affirm the integrity of the patches, for in a case reported by Legendre last year before the Paris Hospital Society the erythema was connected with an actual relapse. It appeared on the sixty-first day of the disease, the relapse setting in on the forty-second, and the necropsy demonstrated the truth of the relapse. On the hundred and second day there were still ulcerations in the intestines.

Clinical Physiognomy.—Some authors have observed the scarlatiniform or morbilliform rash, but this is an exception. In the majority of cases the eruption is characteristic and observed in all infectious diseases. Whenever it may appear it is first noticed upon the backs of the hands, wrists, elbows, legs, knees and buttocks as rounded macules or papules but little elevated above the skin and disappearing under pressure. At first isolated, they soon confluesce and form patches which are symmetric. This is the beginning. In certain cases the eruption extends until it involves the entire body in a uniform and scarlatiniform rash. But this is not all. The papules may become covered with vesicles, bullæ or pustules. On an average the eruption does not last more than five or six days, and it is before the disappearance of the red tint that desquamation sets in. When the patients survive this follows slowly in large flakes, as in scarlatina. It corresponds more or less with the intensity of the eruption.

Gravity.—Several writers have regarded these rashes as devoid of importance. Raymond and Nélaton declare that its influence was only favorable in their three cases and without characteristic impression on the disease itself. Chédevergne also saw a salutary influence from the cutaneous congestion. We to-day must look at this more pessimistically, for in typhoid-fever subjects infectious erythemata have claimed enough victims to force us to regard them as malignant and carrying a gloomy prognosis from the moment that the first papules are seen. Out of 12 cases of Hutinel and Martin de Gimard there were 7 recoveries and 5 deaths; in those of Legendre 3 deaths. And among those that recovered several had a terrible struggle for life.

Therefore, in my opinion, we must hold by Nélaton's and Raymond's statement that every erythema appearing either at the stage of full development or in convalescence is an indication of a severe infection.

What is the exact nature of this infection? Streptococci play an important part in certain typhoid subjects. The bacterium coli has also been incriminated. Very recently Bosc described it as of an intestinal infection from a microbe resembling the bacterium coli. Numerous microörganisms might easily enter the organism through various points of entrance, as the ulcerations of the intestines, the excoriations of the skin and mucous surfaces. Hutinel emphasizes the importance of labial fissures, aphthous erosions of the lips and mouth, erosions of the nose and ulcerations of the throat which he observed in his patients. In our case the eschar on the elbow and the succeeding phlegmon formed important foci of microbic activity Whatever it be, beware of looking slightingly on cutaneous efflorescences. Use no internal antiseptics which may aggravate the exanthem, and only give tonics. Give alcohol but moderately, as albuminuria is the rule in grave cases. Prescribe alkaline drinks and milk. If the temperature rise do not fear to advise cold baths. Calm the cutaneous irritability by emmolient salves and inert powders. Be on the watch for visceral complications—endocarditis, pleurisy or broncho-pneumonia. Examine the abdomen frequently, for the erythema may be the sign of a return of intestinal changes.

Is there a danger of contagion and should the patient be isolated? Certainly, though the risk is slight. Whenever the cases appeared in a series the list has been noticeably short. The 3 cases of Raymond and Nélaton concerned three persons in the same ward. That was in 1878,

when this disease affected Parisians with greater severity than at present. Legendre also reported last year 3 cases in one ward in typhoid-fever patients and 1 in a case of Bright's disease. But the only epidemic worthy of the name is that described by Hutinel and Martin de Gimard. It occurred in 1889 at the Children's Hospital. From June 1st to December 1st there were 38 cases of typhoid fever, and of these 12 were affected with infectious erythema, and that from the beginning of September and in two distinct wards. *But only the typhoid cases were affected* and none of the more or less debilitated children who lay in the neighboring beds. Thus this pretended epidemic attacked only the typhoid subjects and respected the others. You can understand my skepticism.

Besides, if you desire further information look outside of the narrow limits of this disease, for these erythemata are not the exclusive property of typhoid fever. They are observed in diphtheria, septicemia, in puerperal infection, gonorrhœa, and especially in cholera. In this latter disease it is much less rare than in typhoid fever. I have observed it in 1892 in 21 cases out of 400. Some authors hold it to be still more frequent. Duflocq has reported 18 cases in 215. Now, this eruption has a singular similarity to that of typhoid fever. The papules begin on the backs of the wrists, on the forearms, the ankles, around the knees, the buttocks and are symmetric. They then invade other regions, forming large plaques which may become scarlatiniform and desquamative. In my experience with the cholera I have not observed a single fact which might explain the contagiousness of the exanthem. Among the many physicians who have cared for these patients, none has believed in the transmission of the eruption by artificial means. More work is necessary to fix the bacteriology of this erythema after typhoid fever.

THERAPEUTICAL SUGGESTIONS FROM FOREIGN JOURNALS.*

PNEUMONIA IN CHILDREN.

Dr. D. C. Loewenthal (*La Semaine Médicale*, No. 66, 1894) recommends as an efficient measure to control the high temperature of pneumonia in children the following formula:

Phenacetine.....	āā o	o6	gr. j
Sulphate quinine.....			
Caffeine.....	āā o	o1	gr. 1-6
Benzoate soda.....			

For one powder. Make twelve such. One every two to four hours in a child of sixteen months.

BONE-MARROW IN ANEMIA.

Drs. Fraser and Begger (*Wiener Medizinische Presse*, No. 44, 1894) have obtained very satisfactory results with marrow of bone in the treatment of anemia. The former had under his care a man who had suffered for several years with grave anemia where the different preparations of iron and arsenic were inactive. The patient was ordered to eat daily one hundred grams (over three ounces) of the marrow of beef and calves' bones; iron and salol were also given at the same time. In three weeks there was a distinct improvement of his general condition, which was apparent in an increase of the hemoglobin and the number of blood corpuscles. Several weeks after this the patient was able to go to work. Dr. Begger employed this treatment in a boy of twelve years who had suffered for a long time from splenic leucemia, which in spite of iron and arsenic in large doses continued to become worse. At the time of beginning treatment he was very weak; his spleen filled nearly the whole left portion of the abdomen, reaching to the iliac fossa on that side and extending five centimeters over the median line. There were besides, fever, diarrhœa, frequent nose-bleed, dyspnœa and palpitation of the heart. Three or four times a day he received a piece of bread to eat upon which was spread a thick layer of raw marrow. In eight days the icteric color of his skin had disappeared; the fever ceased, the dyspnœa and palpitation vanished in two weeks, while the spleen decreased somewhat in size. The organ gradually diminished in size and the child recovered fully.

BICARBONATE OF SODA IN ARTHRITISM.

Dr. A. Cavazanni (*La Semaine Médicale*, No. 66, 1894) has found the bicar-

*In chage of the translator, F. H. Pritchard, M.D.

bonate of soda to be the best remedy in the treatment of the articular and muscular pains, either with or without swelling, of arthritic patients. It must be given for a long time, in doses of one to four grams (grs. xv–ʒj) a day. With this simple and efficacious measure he has succeeded in relieving eight cases where other remedies had failed. He would not advise its administration in powder, but rather in a weak solution while the stomach is empty.

LARYNGEAL STENOSIS OF DIPHTHERIA.

Dr. Brenner (*Muenchener Medicinische Wochenschrift*, No. 44, 1894) in two cases of laryngeal stenosis from diphtheria observed a remarkable relief by application of cantharidated collodion to the region of the thyroid cartilage to the extent of a spot of the size of a dollar.

CHLOROFORM IN LABOR.

Dr. M. Latta (*La Semaine Médicale*, No. 66, 1894) administers chloroform to all his cases of labor, even if they are perfectly normal in course. In those cases presenting a weakness of the heart he employs a mixture of chloroform and amyl nitrite, containing ninety parts of the former to one of the latter.

UTERINE COUGH AND ITS TREATMENT.

Dr. P. Profanter (*Revue Internationale de Medecin et de Chirurgie Pratiques*, No. 18, 1894) has observed a goodly number of those cases which were described by Aran as uterine cough and which is a reflex affection accompanying various chronic diseases of the female genital organs. The cough being very persistent and occurring in emaciated and weakened women with chronic gynecological diseases, one might easily be misled into making a mistaken diagnosis of pulmonary consumption. The cough is dry, hacking and sometimes hoarse, setting in after the uterine disease has become chronic. Its aggravation during the menstrual periods may set one upon the right road to diagnosis. Bimanual examination will reveal particularly painful points in the pelvis which, upon pressure, will provoke an attack of coughing. Treatment should be directed toward the original affection, yet only at once in robust patients, for in nervous, weakened and irritable women local treatment may cause a distinct aggravation. Therefore the general health must first be improved by hygiene, hearty food, forced feeding, treatment of the concomitant gastro-intestinal symptoms as well as by a quieting the general over excitability by the bromides, hydro-therapeutic measures, etc., while local measures are reserved for a later period. Locally one may employ vaginal injections of hot saline solution and warm compresses to the abdomen.

THE DIFFERENT VARIETIES OF DIET IN CHRONIC BRIGHT'S DISEASE.

Dr. W. H. White (*Hospitals-Tidende*, No. 44, 1894) is at variance with the accepted ideas of the ideal diet in chronic Bright's disease. He has made a series of experiments with regard to the solution of this question. Milk diet is generally advised, as it is thought to cause a decrease in the quantity of albumen excreted by the kidneys. He has found this far from true in his cases. As a rule, the albuminuria remains unaffected by any variety of diet, even with consumption of a large quantity of albumen. In those cases with a great amount of albumen in the urine this fact of itself is not of such importance as is generally considered. He has seen cases where the loss in albumen was less with a mixed diet than with one of milk and carbohydrates. The albuminuria is not the most important symptom and a treatment directed against this alone is faulty. Milk is said to be both easily digestible and diuretic. The former is not always the case, and as to the latter it is doubtful if diuretics will do good in this disease. Milk is also thought to favor elimination of the toxic substances, which is again doubtful. He has found a mixed diet to give the best results in practice. It did not produce uremia, the general condition and strength of the patient remained better and the circulation was stronger than with milk and carbohydrates. It strengthens the system against the loss of the albumen, as the ingested albumen covers this loss. Mixed diet is also better tolerated, gives rise to no disgust nor anorexia as the milk and carbohydrates sometimes do.

CHRONIC SCROFULOUS OTORRHŒA.

Dr. Isaia (*La Semaine Medicale*, No. 64, 1894) has obtained good results in the

chronic otorrhœa of scrofulous subjects with either of the following formulæ:

Balsam Peru.....	āā 10	o	3ijss
Alcohol.....			
Muriate cocaine....	0.50–1	o	grs. vijss–xv
Balsam Peru.....	5	o	3j¼
Glycerine.....	10	o	3ijss
Muriate cocaine....	0.5–1	o	grs. vijss–xv
Balsam Peru.....	āā 2	o	grs. xxx
Balsam tolu.....			
Alcohol.....	5.0–10	o	3j¼–3ijss
Muriate cocaine....	1.0–2	o	grs. xv–xxx

Having previously cleansed the ear either with a solution of resorcine, boric acid or simple salt and water, the walls of the canal are anesthetized by a few drops of a solution of cocaine, after which a little of one of these solutions is instilled into the ear or it may be applied on a pledget of cotton. In nearly every case this treatment will give good results, but it is only indicated when the skin of the external ear and auditory canal are intact, for if it be excoriated the irritating qualities of the balsam might lead to painful inflammatory complications.

ALOPECIA AFTER ACUTE DISEASES.

Professor Kaposi (*Revista de Ciencias Medicas de Barcelona*, No. 16, 1894) in the treatment of falling out of the hair during convalescence of acute diseases, cachectic states, and women after confinement, recommends highly the following formula:

Alcohol.....	200	o	3vjss
Veratrine.....	0	50	grs. vijss
Tinct. benzoin.....	1	o	gtts. xv
Salicylic acid.....	0	50	grs. vjss

Apply locally.

Dr. Brocq (*ibid.*) advises the following in same condition:

Tinct. lemon peel.....	150	o	3iv¾
Hydrochloric acid.....	4	o	3j

Apply locally.

ELECTROLYSIS IN RODENT ULCER.

Dr. I. Parsons (*Norsk Magazin for Lægevidenskaben*, No. 11, 1894) has obtained very good results in rodent ulcer with electrolysis. It is not accompanied by hemorrhage and its action may be limited to the affected part, while the operation, which is done under anesthesia, is followed by no pain. Two needles are employed with a current of two to four hundred milliamperes with continuous alternation of the current. The resultant eschar will fall off in eight to ten days, the wound heals readily and a firm cicatrix results. In case of recurrence, repeat the operation.

TREATMENT OF EPITHELIOMA OF THE SKIN.

Dr. Darier (*Norsk Magazin for Lægevidenskaben*, No. 11, 1894) has treated with success five cases of cutaneous epithelioma in the following manner:

The crusts are removed by antiseptic poultices of potato starch boiled in a 1:1,000 solution of the bichloride and the ulcer is anesthetized with a ten per cent. solution of cocaine; then it is painted with the following:

Methyl-blue.....	1	o	grs. xv
Alcohol.....	āā 5	o	3j¼
Glycerine.....			

All the blue-colored spots are then touched with a twenty per cent. solution of chromic acid, which changes the color to purplish-red; a second application of the methyl solution is again made. The ulcer is then covered with a sublimated dressing. This treatment is repeated four to five times, with intervals of two or three days, but the methyl-blue is only to be used as long as the new-formed skin takes up the coloring matter. This method is not painful and is very rapid in its results. In superficial epitheliomas from three weeks to two months are sufficient for a cure—about one month to the square centimeter. In deeper infiltrations one may also employ injections of the methyl-blue together with the local applications, but here chromic acid must be applied with great caution.

TREATMENT OF BURNS OF THE EYES BY AMMONIACAL VAPORS.

Dr. Trousseau (*La France Médicale*, No. 47, 1894) recently read a paper before the Medical Society of Paris on the effects of vapors of ammonia upon the eyes and their treatment. He divides the lesions into three degrees. These states are those caused by the vapors and not the entrance of the liquid into the eye. The effects of the first degree, hyperemia, photophobia and lachrymation, may persist for several days, and if somewhat advanced there may be swelling of the conjunctivæ, purulent secretion of more or less abundance which causes the lids to adhere; the cornea will be found intact. Compresses wet in tepid boric-acid solution and frequently renewed will bring about a restitution in a few days.

In the lesions of the second degree the condition is the same, with the formation

of eschars upon the conjunctivæ which render symblepharon prone to follow. This is best avoided as much as possible by frequent movements of the lids and the introduction, now and then, of a little vaseline between the lids. In the burns of the third degree the symptoms of irritation are much more pronounced. Even five or six days after the accident the conjunctivæ are reddened, violet-colored, œdematous and secrete muco-pus. Though the corneæ are apparently intact, one should not make too favorable a prognosis on account of the liability to symblepharon and the formation of corneal opacities. A deceptive amelioration may set in after a short time, to be followed by the appearance of milky white and complete opacity of the cornea. The eye may be seemingly intact for some time, while really it is severely affected. He warns against the danger of incautiously opening bottles of ammonia or of letting the vapors come into contact with the eyes.

TREATMENT OF LEUCEMIA.

Dr. Vehsemeyer (*Rivista Clinica e Terapeutica*, No. 10, 1894) thinks that all the remedies proposed in the treatment of leucemia are not only inactive but incapable of modifying, in the slightest manner, the course of the affection. He has found berberis vulgaris, either in fluid extract, pill or powder, to be a most excellent remedy in this disease. He calls attention to its elective action upon the intestine and the appetite. In one of his numerous cases where he tried this drug the results were truly marvelous. The patient, a young lady of a weakened appearance and of a delicate constitution who was affected with leucemia to an extreme degree, under the influence of this drug soon felt decidedly better, her appetite and intestinal functions greatly improved and the spleen decreased very much in size. This result was obtained without any particular attention being given to the diet, which, however, he thinks an important accessory. He advises an increase in carbohydrates in the dietary.

THE BISMUTH TREATMENT OF GASTRIC ULCER.

Dr. Savelieff (*Muenchener Medicinische Wochenschrift*, No. 45, 1894) reports from Professor Senator's clinic in Berlin that the treatment of gastric ulcer with the subnitrate of bismuth has given there excellent results. Ten grams (ʒijss) of the drug are taken at one time suspended in two hundred grams (ʒvj ʒij) of water, and that portion of the subnitrate remaining in the upper portion of the œsophagus and mouth is washed down with a few swallows of water. If washing out the stomach is necessary, then this mixture is introduced through the stomach tube. A cure is generally obtained with the ingestion of two hundred grams of the drug. Immediately after taking it the patient is instructed to lie down for about an hour. In this position the ulcer is easily covered with the fluid, and still better if the hips be elevated about fifteen centimeters. Naturally the ordinary dietetic restrictions are to be followed. Nearly all the patients attended to their business during the treatment.

TREATMENT OF RECURRENT ECZEMA OF THE UPPER LIP.

Drs. Perrin and Aslanian (*La Semaine Medicale*, No. 64, 1894) in the management of recurrent eczema of the upper lip recommend cutting the mustache short and applying locally, several times a day, a supersaturated solution of boric acid in absolute alcohol. This will destroy the staphylococci aurei which they claim are normally present on the upper lip and around the nostrils, either alone or associated with other microbes, and which play so important a part in the production of eczema of the hairy portions of the body. Care should be taken not to take cold, as the consequent purulent discharge will aggravate the disease.

SMALL SON—Us boys is gettin' up a dog show, and I bet our Fido will take the prize. Father—Fido has no pedigree. Small Son—This isn't any European aristocracy affair. This is an American dog show.—*Street & Smith's Good News.*

"Is your daughter improving in her painting?" Mother—Well, I should say so. Her last picture was so good that only three of the family failed to guess what it was.—*Chicago Inter-Ocean.*

CORRESPONDENCE.

THE BOARD OF CHARITIES AND CORRECTION—OF MEDICINE.

EDITOR MEDICAL AND SURGICAL REPORTER—SIR:

The profession of Philadelphia by the action of the Board of Charities and Correction dismissing a conscientious, progressive and scientific physician from the staff of the Philadelphia Hospital, has received a shock which has shaken it throughout its entirety, which threatens the integrity of the conditions upon which its growth and development depend, and which calls for explanation and protest and for an effort to secure protection from a repetition of such a serious onslaught and from the chagrin and shame which must be suffered until the citizens of the Commonwealth understand and appreciate the principle threatened and the injustice and wrong perpetrated.

Tersely the procedure may be stated to be that for instituting means of determining an accurate diagnosis and employing instruments of precision essential thereto, a board, composed of four laymen and one physician, ignominiously discharged a physician from the staff and publicly censured and falsely charged him with criminally experimenting, permitting patients to suffer untreated in order to subserve some ulterior motive.

It is needless to unbury the history of the world's persecution of those who established truth and demonstrated principles underlying progress and development in every sphere of life, whether in religion or the sciences, but to direct attention to the fact that the same power of ignorance to-day occupies positions where the relationships are improper, and that the vital forces and principles upon which the advance and the conditions determining a nearer approach to the perfection of the art and science are in danger of serious injury. Inability to comprehend the discoveries of value with which vivisection supplies the profession explains the existence of that well-meaning but densely obtuse organization of sentimentalists known as the Anti-Vivisection Society; parallel ignorance is the soil from which anti-vaccinationists have sprung; small mentality gives us the mushroom growth of the "pathies" and the unfortunately ignorant or naturally stupid brethren who either can't or won't advance, and will, by reason of their deficiencies, cry out in opposition to progress and betterment, are the pitiable monuments to retrogression. To such, both lay and professional, it is time that processes of education and control be directed.

Misrepresentation is the invariable method of their obstructionist attacks, and indeed it cannot be otherwise, for to state a conclusion which is a misunderstood or uncomprehended truth is to falsify. A lie is modified truth. It is not intentional when the result of well-meaning ignorance, and this it is which renders it venomous, especially when emanating from one who in matters within the sphere of comprehension is recognized as honorable and truthful. Illustrations of the unintentional misrepresentations are had in the English Government, where honorable representatives, by proclaiming their convictions (misunderstandings), created such a sentiment that a law was enacted prohibiting vivisection, and thus was delivered a blow at the principles of progress which was of sufficient power to stop the wheels of knowledge in that direction for years. The investigation of the poison of venomous reptiles from which annually many thousands of English subjects die, having for its end the discovery of medicines that would avert the fatal consequences of snake-bite, was—think of it!—prohibited by law, and thus for years while a few animals were saved thousands of human lives were sacrificed. To the bulwark of American scientific medicine, the University of Pennsylvania, intelligent England turned for deliverance, and forwarded to us reptiles so that the investigations could be continued. The results more than justified and demonstrated the value of the application of the principle of progress and truth. Sunstroke, our summer destroyer, was not understood until Professor Wood a very few years since investigated its effects and discovered how

its fatal results were occasioned, and notwithstanding that annually lives are saved by the hundreds as the result of this scientific labor, the same evil spirit of misrepresentation periodically attempts to enact laws preventing similar scientific studies.

Does the profession prove true to its principles when it quietly submits to wounds inflicted upon any portion of its functional life without resentment? Is it to be subjected to dethronement by the authoritative power of ignorance because it does its duty properly and well? Are we to be persecuted because we employ means to determine correct diagnoses and establish proper methods of treatment? Are we to be subjected to mass opposition and misrepresentation on the part of the ignorant and rendered liable to damage suits because processes of advancement and betterment and a higher science are being practiced? Let us see to it that with the intelligent our cause is made known, and either deprive lay committees and boards of directors having supervision over medical institutions of their jurisdiction, or secure the establishment of such bodies composed of enlightened medical gentlemen who can understand the principles underlying the betterment and progress of the profession and who will earnestly advocate and secure upon a firm foundation the best conditions for the best ends.

The medico-legal bearing of the act of the Board of Charities and Correction recently chronicled is particularly striking. Suppose a peculiarity of a fracture could best be treated by the application of a modified dressing which would secure a more nearly perfect result than that which would follow the employment of an orthodox splint, and a slight degree of deformity still exist and the patient should institute a suit for damages. In the evidence would appear the fact that the orthodox dressing was substituted by a more desirable modification, and what would then be the position of the surgeon? If the jury were composed of such minds as characterizes the Board of Charities and Correction, it would be better to engage in some other vocation in life. Is the comparison not true? Unless Dr. Daland "feeds" quinine at once to a malarial case without first ascertaining the exact condition of the sufferer and definitely determining the degree of damage to the corpuscles and hæmoglobin, he is to be publicly censured and persecuted.

This, then, is the fact: no member of the staff of the Philadelphia Hospital dares to perform his duty as a scientific physician under the regulations of the Board of Charities and Correction as at present constituted without incurring the risk of public censure and dismissal. To the citizen who is taxed for the support of his unfortunate fellow-being and for the best interests of the afflicted the physician owes and—it may be said with pride—gives his best talents; and when the exercise of this is regulated or controlled by such conditions which, to the discredit and shame of this medical center, are permitted to exist at the Philadelphia Hospital, it is time to effect a change.

Truly, the board did not intend to act so reprehensibly and disgracefully; it simply did not know better, and they should therefore not be censured, but replaced by one that possesses the requisite intelligence necessary to enable it to comprehend, appreciate and aid the scientific and enlightened physician in the faithful discharge of his duty to the best interest of the institution and the best good of his patients. This can best be effected by the establishment of a medical board composed of medical gentlemen only and a business board composed of business men, each having jurisdiction only over its particular territory; and it is the duty of every member of the profession to do all in his power to accomplish this end.

Very truly,

H. Beates, M.D.

Philadelphia, Pa.

Victim—Ooo! Phew! You charge double price for this kind of a shampoo, don't you? Barber—Yes. Victim—So I thought. I notice that you are making me suffer twice as much.—*New York Weekly.*

Housekeeper—Those eggs you sold me were stale and I asked you for fresh-laid eggs. Dealer (patronizingly)—Those eggs are fresh, madam, not salted, and they are laid eggs, madam, not manufactured. Had you desired eggs recently taken from the nest you should have asked for freshly laid eggs.—*New York Weekly.*

THE MEDICAL AND SURGICAL REPORTER

ISSUED EVERY SATURDAY

Address all communications to P. O. Box 843, Philadelphia, Pa.

HAROLD H. KYNETT, A.M., M.D.
Editor.

PENFIELD PUBLISHING COMPANY
Publishers.

Editorial Offices, 1026 Arch Street, Philadelphia, Pa.

Entered as second-class matter at Asbury Park, N. J.

TERMS:—Three Dollars a year in advance. Sent four months on trial for $1.00.

REMITTANCES should be made payable only to the Publishers, and should be made by Money Order or Registered Letter.

NOTICE TO CONTRIBUTORS:—We are always glad to receive articles of value to the profession, and when used they will be paid for, or reprints supplied, as the author may elect. Where reprints are desired, writers are requested to make a note of that fact on the first page of the MS. It is well for contributors to inclose stamps for postage, that the articles may be returned if not found available.

SATURDAY, DECEMBER 22, 1894.

EDITORIAL.

THE DETERMINATION OF SCIENTIFIC MEDICINE BY POLITICS.

The action of the Board of Charities and Correction in removing Dr. Judson Daland from the professional staff of the Philadelphia Hospital contained a genuine surprise for medical practitioners, if not for medical professors and politicians. It was not the gross injustice done an individual, nor the rebuke to conscientious performance of duty, nor yet the outrage to inoffensive efforts to advance humanitarian science, that distinguished the surprise. These items might provoke comment, but could scarcely cause amazement, for, unfortunately, they are of too frequent occurrence. It is a matter of common observation that individual qualifications and trained excellence carry no weight as compared with "influence" in formulating the decisions of bodies of professional philanthropists who are administering public trusts. The surprise in this instance is that the fiction is stranger than the fact. The reason assigned by the board for their unjustifiable action is a marvelous exhibition of novelty, simplicity and *naïvete*. It is novel, in that it is the first medical bull publicly made by the new faculty of municipal science; its simplicity is so unmarred by intellectual adornment that it reaches but a step from the sublime. Its *naïvete*, or knavery, is as patent as its simplicity. But this official dictum will relieve the public of speculating as to the significance of some matters which, presumably are merely coincidences. The members of the board have assigned a reason, and this must be accepted, for they are all honorable men.

If any should consider this reason too attenuated to stand unsupported, in justice to the Board of Charities and Correction they should bear in mind the fact that this is the first public appearance of that organization in the *rôle* of an authority in medical science, and furthermore that every-day familiarity with the wants of the needy and with the iniquities of the vicious enable them to take cognizance of influences which do not appear on the surface, and the revelation of which might prove detrimental to the public welfare. Similar instances are not unknown in other diplomatic circles. It violates no confidence to say the explanation offered is,

within our knowledge, the only ostensible reason.

From creditable information at hand the matter stands about as follows:

Dr. Daland is one of the hardest workers in the medical profession, most of his time being spent in original research. He has just finished his second year at the Philadelphia Hospital as a visiting physician. Since his election to the staff he has spent most of his time in the wards, frequently serving for other physicians in emergencies.

The terms of all the medical staff expire with the year. Usually they are all reëlected. When the board met recently the election was about the last thing done, and not a word was said about any change of any kind. Each member prepared his ballot and handed it in, and the result showed the reëlection of all the staff excepting Dr. Daland.

The board assigned as the reason for not reëlecting Dr. Daland that it objected to a certain kind of treatment which he used. It is alleged that while treating some patients who had malaria he did not give them quinine at a certain stage in the disease because he wished to take a few drops of the blood during the chill accompanying the complaint so that he might examine it with a view to advancing medical science.

The president of the board, asked why this action was taken, finally said: "Because the board preferred the other man. The board differed with Dr. Daland in a matter of treatment of patients; that is all. Personally I have the greatest regard for Dr. Daland. I admire him for his abilities and for the work he has done. But with other members of the board, I disagreed with him about certain matters of treatment, so I voted for the other man." Incidentally no complaint had been made by patients subjected to this inhuman barbarity.

Dr. James W. Walk, who was the only member to support Dr. Daland, is quoted as saying: "My position is this: The question of medical treatment in the hospital is a technical matter, and I do not think that laymen are competent to decide it. If the board has any objection to any method of treating patients, it ought to have a commission of physicians pass upon it. It doesn't seem to me to be in the sphere of the board. Dr. Daland has labored so faithfully and so well since he has been at the hospital that I did not think we ought to drop him because of treatment, the merit or demerit of which is a medical question."

Dr. Horatio C. Wood, who is accustomed to use plain terms when he unburdens his mind, in a public interview said, among other things:

"As a result of careful inquiry it was evident that the allegations made by the Board of Charities were not only untrue, but that at the time of the voting in the afternoon, if these gentlemen did not know that these allegations were untrue it was because they had failed to investigate. The patients were treated, though not with quinine. So that the Board of Charities has arrogated to itself the right to decide not only that no experiments shall be made in the hospital, but that a physician shall be removed because his treatment does not meet the approval of the Board of Charities.

"Allowing, however, for the moment, that in this arrogation of the Board of Charities it is acting wisely, it is plain that in removing Dr. Daland they acted unjustly in that they failed to notify the medical staff that they did not consider any of its members had the right to make any experimental studies in the hospital.

"The greatest danger that threatens the medical prestige of Philadelphia is, in the first place, because the medical laboratories are not supported by the people of the city; and in the second place, because

the Philadelphia City Hospital is administered in such a way as to make it almost impossible to use it for the increase of medical knowledge. It is not because there is lack of ability in Philadelphia or lack of men willing to make the personal sacrifice that we have to go abroad for our medical discoveries, but because the mayor habitually puts in charge of the Philadelphia Hospital and gives so much power in the hospital to them, men, honest that may be, but without natural force of intellect which will allow them to take broad views of important problems. It is perfectly true that no physician has the right, for the sake of furthering human knowledge, to endanger human life. But medicine is an experimental science, and can only grow by experiments and the experiment which is based upon rational groundwork and is carried out with care, does not endanger human life or human body integrity, is not only justifiable, but imperative. It was for spending his time, without hope of any direct personal reward, in such labor and in such a way that must lead to results, that the Board of Charities and Correction removed Dr. Daland, and in such a removal struck a great blow at the medical interests of the city and of the world."

Possibly the Board of Charities and Correction was panic-stricken at the thought of a visit from avenging zoöphilists with their formidable lachrymal engines run by sentimental accumulator cells. Certainly some powerful agency disturbed its equilibrium.

While THE REPORTER agrees with Professor Wood in his estimate of the effect upon medical Philadelphia resulting from the narrow policy obtaining in the management of municipal charities, it believes that there is another and even greater danger to medical prestige for which the profession itself is responsible and which permits of the existence of the conditions complained of. So long as medical opinion sanctions or even tolerates the existence of that form of multilocular (*multus*, many; *locus*, position) parasitism which monopolizes public appointments to the detriment of science and institutions alike, there can be little hope for satisfactory progress in scientific medical research.

While civil and medical politicians are playing into each other's hands, the pot must not call the kettle black.

ABSTRACTS.

THE INJUSTICE OF COMPETITIVE CHARITY.

Has the medical staff nothing to say as to unlimited endowing of free beds in enterprising hospitals, and the free treatment of anybody and everybody, upon payment of nothing or of some hypocritically small fee? Is this simply and solely a matter within the control of lay boards of trustees and of professional philanthropists? These questions are suggested by a widely distributed circular issued by a large hospital in a city of the eastern United States which reads as follows:

The Board of Trustees of the —— Hospital of the city of —— strongly recommend the following advantages offered to the public.

Mill and factory owners, lodges, and beneficial associations can secure a bed at the —— Hospital for 365 days by paying $200, and upon averaging the days may have several patients in the hospital at the same time.

Subscription books can be obtained by working people of both sexes up to the

age of fifty, subject to the regulations of the hospital, whereby, on paying an initiation fee of one dollar and monthly installments of fifty cents, each subscriber may be treated in case of sickness entirely free of further charge. Heads of families and owners of factories should particularly recommend to their servants and employees to avail themselves of this excellent facility.

Of course, if the medical officers of this hospital have assented to this plan, nothing more in criticism can be said except to ask them:

1. Have you any right to assent to it for *other* physicians who in the course of human events may take your places by and by?

2. If all hospital staffs assent to it, have the non-hospital physicians no criticism to offer and no rights to be upheld?

3. Has the medical profession nothing to suggest as to the encouragement of pauperism and the just claim of members of the profession to some compensation for medical services from those able to pay? Has the public no duties to the medical profession in this debauching competition in "offering advantages to the public?"

4. By what principle of common justice and decency can it be claimed that well-to-do "workmen, lodges and beneficial associations" are unable to pay medical men something for their services, and that the professionally benevolent should dispose of medical service by virtue of being trustees of hospitals?

In England the impudence of these trustees and dictators of medical men has become a public calamity, and the same trend is more than evident here. Have medical societies and associations, colleges and academies of physicians, no word to utter as to the huge and growing abuse? Instead of permitting or encouraging, they should warm the endowers, supporters and trustees of hospitals and the easily deceived public that the blind sentimentalism of charity almost inevitably ends in wrong and ruin, and that whatever injures the medical profession in the long run injures the health and well-being of the general pubiic.

Not a dollar should be given to any hospital that is not accompanied by an express stipulation on the part of the giver, and by a promise as explicit on the part of trustees and officers, that no person (except in emergency cases, etc.) shall receive medical aid in the institution except it have been systematically and clearly made evident that such person is unable to pay anything for the service. Medical men are already overburdened with necessary or inevitable charity work in private, hospital and dispensary practice, but they display a criminal negligence as regards the increase of this evil of charity abuse, and either supinely submit to the dictatorship of mechanic routine or of trustees, and even go so far as enthusiasm in professional hari-kari. It is high time the brakes were applied.—*Med. News.*

THE "OYSTER EPIDEMIC" OF TYPHOID FEVER AT WESLEYAN UNIVERSITY.

H. W. Conn, Ph.D., professor of biology, Wesleyan University, Middletown, Conn., writes (*Med. Rec.*): While it has been for some time suspected that raw oysters may be a possible means of the distribution of germ diseases, there have been no cases where the theory has been positively demonstrated. The recent outbreak of typhoid at Wesleyan University is, in this respect, therefore, so unique as to be of especial interest, and for this reason the results of the investigation as to the cause of this outbreak are given below in some detail.

The history of the epidemic was as follows: About October 20th there began to appear among the students a number of cases of mild fever, which were for several days not regarded as serious. After about a week, however, one or two of them developed into typical typhoid fever, and several others were suspected of being of the same nature. For a week and a half following October 20th new cases appeared somewhat rapidly, and by November 1st there had appeared among the members of the college about 23 cases of fever of more or less prominent typhoid character. After November 1st the number of cases diminished, although 2 appeared on November 2d, 1 on November 5th, and 1 as late as November 9th. Subsequent to

that period on new cases have developed. There have been among the students about 26 cases of fever which have been, with more or less reason, regarded as typhoid. Of these 23 have been pronounced typhoid by the physicians in charge, while the others are of such a slight nature and have so few typhoid symptoms as to make it at least doubtful whether they were really typhoid fever. Of the cases of undoubted typhoid, 13 have been very serious and the others not very serious. Four deaths have occurred, and at the time of writing there are one or two other patients in a critical condition. It will be noticed from these facts that the outbreak of typhoid fever in college began about October 20th and the last case appeared about November 9th.

As soon as the serious nature of the disease was recognized an investigation as to its cause was begun. Of course, at that time it was not known that the disease would be limited to the dates above mentioned, and it was regarded as possible that there was in college a constant source of infection. The students that were sick were found to room in all of the college buildings and also in several houses in town. Moreover, it was seen that they did not board at the same boarding-place, and there appeared at first, therefore, to be no connection between them except the college campus. The first object of suspicion was the water from two wells at the back of the college buildings, which was used occasionally by the students of the college for drinking purposes. On this suspicion the use of the water was immediately stopped, and an examination of the wells was made. Chemical examination showed in one of the wells an exceptionally large amount of albuminoid ammonia. The examination was made immediately after a heavy rain following a long drought, which might possibly have accounted for this. A bacteriological examination was set on foot according to the method of Professor Vaughn. Bouillon cultures from the water of each well were made and cultivated for two days in a culture oven. Then 20 c.c. of the culture was inoculated into the abdominal cavity of white rats. The white rats, however, were entirely unaffected by the treatment, indicating plainly that pathogenic germs of a typhoid nature could not have been present. Moreover, a little inquiry showed that the wells could not have been the cause of the trouble. In the first place several of the students who were sick had certainly not drank from either of the wells. Secondly, the wells were used almost as much by certain young people from the town as by the students themselves, and there was no corresponding outbreak of typhoid in the city. In fact, Middletown, at the time, proved exceptionally free from all kinds of fevers. These facts taken together made it necessary to exclude the wells from the possible sources of infection.

It was noticed at the outset that the ladies of the college, about fifty in number, were exempted from the disease. This, of course, indicated that the cause of the infection could not have been in any unsanitary condition connected with the public college buildings in general, but must have been some source of infection to which the young men were exposed, and not the young ladies. After carefully looking over the facts it was further found that all of the cases of sickness, with three exceptions, occurred in three of the college fraternities. The men did not all room in the fraternity buildings, though most of them did board at the fraternity club houses. This localizing of the disease to three fraternities proved the first usable point of departure in the investigation.

In the college there are seven fraternities, and most of the college students board at the fraternity clubs. In the three fraternities afflicted there were about 100 students, and among the 100 students, as above stated, about 25 cases of typhoid developed. This is seen at once to be an extremely large proportion. It is usually supposed that some 10 to 15 per cent. of those exposed to typhoid take the disease, and here was a percentage at least twice that proportion. This large percentage indicated at once that there must have been some extremely virulent source of infection to which probably every member of the fraternities was subjected. In no other way could the large percentage of cases among the students be accounted for.

In the attempt to locate the source of the trouble in connection with the three fraternities, however, every source of possible contagion was investigated. The plumbing was examined, and though

found to be defective in at least one case, in the other houses it was in first-class condition. It was hardly possible to accuse the plumbing, however, inasmuch as the three clubs afflicted were situated at a distance of half a mile from each other and were connected with different sewers. The probability that these three houses should have been defective in their plumbing at the same time was very remote, and their connection with different sewers, together with the absence of typhoid in the city, made it impossible to accuse the plumbing. The possibility of transference of the disease from house to house was also considered, an attempt being made to find some early case which could possibly have been a source of infection to the other houses. But this proved futile. There were no early cases, for almost at once, upon October 20th, two or three cases developed simultaneously, and of course this made it impossible to explain the epidemic by personal contagion. It was found, moreover, that the students who were taken with the disease in many cases had no connection whatsoever with the other fraternity houses, either through their room-mates or otherwise. Another source of possible infection was suggested in a lot of new football suits which had recently been purchased, and which had been thought to have given rise to one or two cases of blood-poisoning. Inquiry, however, soon showed that most of the students who were sick had nothing to do with the football suits, and they were of necessity ruled out.

Naturally, one of the first objects of suspicion, after the disease had been located among the members of the three fraternities, was the table of the clubs. An examination was immediately made into the sources of supply of these three fraternities. All of them used the city water, which, of course, made it impossible to accuse the water as a source of the typhoid, there being no corresponding typhoid fever in town. The milk-supply of the three fraternities was also ruled out by several facts. The three fraternities were supplied by two different milkmen, and each of these milkmen supplied one or more of the other fraternities in college, as well as a large number of customers in town. Moreover, upon inquiry it was learned that these milkmen had not exchanged milk with each other, and that they lived at a distance of several miles from each other outside of the city. No cases of typhoid fever could be located in or near either of the milk-farms as having occurred within the last six months. It was, therefore, impossible to accuse the milk. In the same way all the other articles of food used by the fraternities were investigated, without success. The three fraternities did not have the same grocer, nor the same butcher, nor the same butter supply, nor did they obtain fruits from the same sources; and whenever, in regard to any article of food, it was found that there was a point of likeness between the three fraternities, it was found at once that the other fraternities in college shared with them in having the same source of supply. After carefully inquiring into every article of diet used on the ordinary table, it was found necessary to exclude the table as a source of infection. The attempt was then made to find some special, unusual article of food that had been used during the fall by the three fraternities, but it was impossible to do so.

When the dates of the outbreak above given are considered, it will be seen that they have themselves almost conclusively pointed to one single source of infection that had occurred in these three fraternities at a date something like two weeks earlier than October 20th. The period of incubation of typhoid fever is known to be from about eight days to about twenty-eight days, and all of the cases came in such close connection with each other as to indicate almost beyond question that they were due to one single source of infection, that occurred within two weeks prior to October 20th. On October 12th all of the fraternities in college held their annual initiation, followed by an initiation supper, and suspicion was soon thrown upon these suppers. The date of the suppers was exactly such as would be needed to explain the outbreak, and as soon as it appeared that new cases diminished after November 1st, these suppers became the most probable source of infection. When the initiation suppers were taken into consideration, one of the three exceptions above noticed disappeared, because one of the men who did not belong to the college fraternities had attended one of the three initiation suppers. An examination of the bills of fare at the sup-

pers in question was therefore instituted. It was found that nearly every article of food must be excluded, on the same grounds as the articles of food at their ordinary table. Their milk, their water, their ice, their ice-cream, their fruits, their celery, and in fact nearly all other articles of diet, they either did not obtain from the same source, or obtained them from a source which supplied every other one of the seven college fraternities as well as the people in town. There was found, indeed, to be but four points of union between the three fraternities. One was the celery used in the salad, a second a small amount or fruit, a third some ham, and the fourth the oysters which were eaten. The celery, the ham and fruit, however, were from sources which supplied other clubs and a large part of the townspeople, and could, therefore, not have been the cause of the special infection confined to these three fraternities.

As soon, however, as it was found that the three fraternities each ate raw oysters from the same oyster dealer, the problems began, one after the other, to be solved. It was found that none of the other four fraternities ate these raw oysters. Two of them ate no oysters, a third ate oysters which, however, had been cooked, and the fourth obtained oysters from an entirely different source. Nor could it be learned that the lot of oysters had been used raw to any extent among the people in town, most people cooking their oysters. Another one of the above-mentioned exceptions was also explained at once, because the student, upon being questioned, stated that about the time of the initiation suppers he had eaten of the raw oysters in the store of the oyster dealer. The oysters in question were served at each fraternity on the half-shell, at the beginning of the supper, and it was, therefore, almost certain that nearly every person who attended the banquet ate of them. Correspondence and questioning, however, were immediately instituted, which resulted in tracing in this way a connection between every student who was suffering from typhoid and these oysters, with one doubtful exception of a student who has not yet been personally questioned. It was learned also that there were in attendance upon these three suppers, in addition to the students in the college, a considerable number of alumni from out of town and five students from Yale College. Letters were immediately written, therefore, to all of these persons to learn if they had eaten of the raw oysters, and whether they had suffered from any febrile disturbances. It must be remembered that the alumni were, as a rule, considerably older than the students, and it was, therefore, to be expected that the alumni would be more likely to be exempt from the disease than the students themselves. From twenty responses received from the alumni it was found, however, that there were two cases of genuine typhoid fever, which had developed simultaneously with those in the college, and that there were three other cases of sickness which had not been regarded as serious. These might or might not have had some connection with the banquet in question, though it is quite doubtful. Of the five students in Yale College, two were taken with typhoid symptoms at just four weeks after the banquet. Both of them developed into severe cases of typhoid fever. In regard to these two cases at Yale, it should, however, be noted that they appeared quite late, indeed four weeks after the supper had been held; and although four weeks is not too long a period of incubation to be possible, still it is unusual. They developed, however, at exactly the period that the last case in Wesleyan made its appearance. It is also a fact that there were two other cases of typhoid fever in Yale College that certainly had no connection with these banquets or these oysters, and it is therefore not certain that these two cases are to be attributed to these banquets. It is, however, a remarkable coincidence that of four cases of typhoid at Yale two should have been those who attended the banquet at Middletown and ate of the oysters in question, and that these two should have developed within the four weeks following the banquet. It is therefore at least probable that these cases were due to the same cause.

It will be seen that as soon as the oysters were accused of the trouble two of the three cases above mentioned of typhoid occurring outside the fraternities were at once explained. The fourth case remained isolated. This case was a member of the faculty, who had not attended either of the banquets. He was taken with a slight

fever, and inasmuch as it appeared at about the same time with the students, it was regarded as identical with the other cases. It proved, however, a very slight fever, lasting only a few days, and it is therefore at least doubtful whether it was typhoid. Whether this person ate of the raw oysters cannot be positively determined. It is a fact that raw oysters were eaten at the table where he boarded at about the time of the banquet, but as yet no positive connection between the person and these oysters has been made out. Whether, therefore, this case is to be regarded as an isolated case of fever having no connection with the others and not strictly typhoid fever, or whether it is a fact that it is also explained by some connection with the infected oysters, has not been determined.

Inquiry was made at once as to the source of the oysters, and it was learned that while they had grown in the deep water of Long Island Sound, they had been deposited in the mouth of a fresh-water creek for a day or more to freshen. This freshening, as is well known, consists of the absorption by the oysters of fresh water, which causes them to swell up and become plump. These oysters had thus been "fattened" before being sent to Middletown. Further inquiry showed that, within about three hundred feet of the place where they had been deposited, was the outlet of a private sewer coming from a house wherein were two cases of typhoid fever. The persons in question were a lady and her daughter. They were taken sick at such a period as to call in a physician for the first time October 11th, which, of course, means that the disease had been in its period of incubation for probably considerably over a week earlier. The oysters were sent to Middletown on October 10th, and therefore they were deposited at this place in exactly the time to receive contamination during the early days of these two cases of typhoid. Of those two cases one proved extremely severe, and the lady died on October 21st. In the other case the fever, after running about five weeks, disappeared and convalescence set in. It is, of course, very easy to understand that the typhoid germs could have found entrance into the oysters from this source of contamination. Now, it has been known for some time, having been shown by Foster and Freytag, that the typhoid germs will live for a long time in sea-water or, indeed, in a concentrated salt solution. Specimens of the oysters from the creek, however, were put into the hands of Dr. Foote, of Yale College, who soon showed that if the typhoid germs were forced in between the two valves of the shell they would remain alive in the oyster for a time sufficient to enable the oyster to be carried to Middletown and to be used at the initiation banquets. Whether or not they will grow and multiply in oysters has not yet been positively determined.

Shortly after the oysters had been placed under suspicion it was learned that there were at Amherst College several cases of typhoid fever. Correspondence was instituted which resulted in showing that at Amherst there had been an initiation supper on the night of October 12th. Most of the cases of typhoid at Amherst occurred among the members of one fraternity, who, as at Wesleyan, neither roomed nor boarded together. They, however, had attended the initiation supper on October 12th, had eaten of raw oysters at the supper, and inquiry showed that these raw oysters also came from the same place as the Wesleyan oysters, and had been fattened in the mouth of the same creek. As at Wesleyan, certain wells were first placed under suspicion, but examination showed them to be good. While, of course, this did not conclusively demonstrate that the cases at Amherst were due to the same source of infection as that at Wesleyan, it rendered it at least probable.

The facts above related, it will be seen, point with conclusive force to the oysters as the cause of the typhoid outbreak. The dates of the outbreak, October 20th to November 8th, plainly point to one source of infection about October 12th. The fact that two cases of genuine typhoid developed at the same time among the alumni, and that two others appeared also among Yale students, none of whom have had connection with the three fraternities later than the initiation supper, or before that time, plainly demonstrates the initiation supper on October 12th as the time of the infection. At these initiation suppers only one article of food or drink was used which was not used by the other fraternities in college and by the

people in town in general. That one article of food, the raw oysters (not eaten raw by people in town in general), was learned to come from a place where it was certainly subjected to a probable contamination of typhoid fever from two severe cases of the disease. The use of raw oysters from the same locality elsewhere has been found, at least in one case, to have been followed by a similar outbreak as occurred in Wesleyan. These facts taken together leave no possible doubt that the Wesleyan typhoid fever was caused by the oysters in question.

It must not, however, be inferred that because the lot of oysters supplied at these initiation suppers was infected, therefore that all the oysters from the same locality would be thus infected. The public press has certainly exaggerated the condition of affairs. The oysters from the same locality were widely used in Connecticut, and doubtless in many cases have been eaten uncooked. There has been, it is true, quite a little typhoid fever in Connecticut during the past month, but it has not been possible thus far to trace very much of it to the eating of raw oysters. The probability is that the oysters fattening in the locality in question would not, as a rule, be contaminated, but that it would only be an exceptional condition that would produce the result. It would be necessary that they should be lying in this place at just the period when the typhoid germs were swept by the currents or eddies from the sewer over the oyster-bed; and such a condition, even though there might be continued cases of typhoid in the course of the sewer, would doubtless not by any means be a constant one. Oysters, as a rule, are said to open their shells on flood-tide rather than ebb-tide, and this would, of course, make it more difficult for them to be contaminated by sewage from sewers above them on the creek. While this would by no means make the chance of contamination impossible, it would certainly render it less. It is not to be supposed, therefore, that the oysters deposited in the creek for fattening would all, or indeed many of them, become contaminated by the typhoid material, but that only exceptional conditions would produce the result. Where a private sewer containing typhoid excreta opens in the vicinity of such an oyster-bed, the danger must certainly be considerable. Where the typhoid material is mixed in the city sewers with the large amount of sewage and is subsequently diffused through a considerable body of salt water when the sewer empties into the sea, the danger of oyster contamination must be considerably less. But there must be danger to public health from oysters fattened in any fresh water in the vicinity of sewage.

Doubtless many cases of mysterious typhoid have been due to such a cause. To trace these cases is a matter of extreme difficulty. The peculiar conditions which have occurred here have been such, however, as to bring the matter into clear light, and to throw with certainty blame of typhoid distribution upon a source which has for some time been suspected, but not demonstrated. That the practice of fattening oysters in the mouth of rivers and in the vicinity of sewers is dangerous to the public health, is beyond question shown by the combination of conditions which have made it possible to trace the Wesleyan typhoid outbreak to the eating of a lot of infected raw oysters.

Hopeful.

"How is your son getting along in college?" asked Farmer Corntossel's neighbor.

"Purty well in some ways. I don't know how he's doin' in his studies. But from his last photograph I jedge he's discovered a hair tonic thet'll make his fortune."—*Washington Star.*

WATTS—Tebson must be awfully afraid of his wife. He is always telling us how she will give him fits if he don't hurry home. Potts—That's the best sign in the world that he is not afraid of her at all. The man who is bossed by his wife never says a word about it.—*Indianapolis Journal.*

AN eminent physiologist declares that the best remedy for indigestion is to whistle for a half-hour after a meal. Most of those who whistle for their dinner never get indigestion from overeating.

"JACKSON tells me the last thing he wrote was accepted. Do you know what it was?" "Yes, his resignation."—*Tit-Bits.*

CURRENT LITERATURE REVIEWED.

IN CHARGE OF ELLISON J. MORRIS, M.D., AND SAMUEL M. WILSON, M.D.

THE AMERICAN JOURNAL OF OBSTETRICS for November.

Inflammatory Disease of the Uterus and Appendages and of the Pelvic Peritoneum

is the subject of a series of papers by well-known operators. These papers were read in a discussion before the American Association of Obstetricians and Gynecologists, at Toronto, September 20, 1894, the introductory remarks on the subject being furnished by William Warren Potter, M.D., of Buffalo, N. Y. In this paper the author reviews the history of the knowledge of inflammatory disease in the pelvis and urges that the profession be not deceived by the so-called conservative teaching of the present day which would leave organs that have ceased to perform their physiological functions and have become a menace to the woman's well being.

The clinical history of the disease is well pictured by Charles A. L. Reed, M.D., of Cincinnati, Ohio; while the causation and pathology falls to the share of L. S. McMurtry, M.D., of Louisville, Ky. Pelvic inflammation originates, he says, practically without exception, from septic infection. This may be specific or traumatic, including among traumatic causes the wounds of child-bearing and abortion. Puerperal infection exceeds all other etiological factors in this disease. There is abundant evidence that many puerperal women are infected with gonorrhœa and that both the puerperal and specific causes may coexist in the same individual. A different class of traumatic infection is that of certain surgical operations and manipulations upon the uterus. Such are the injury and contamination of sponge tents, of steel dilators, and operations upon the cervix and within the uterine cavity. It is not the traumatism *per se* which begets the inflammatory process; it is the admission of septic material. The inflammation is prevented by a healthy, clean mucous membrane and a proper aseptic condition of instruments.

The section on diagnosis and prognosis is contributed by J. F. W. Ross, M.D., of Toronto, Can. He admits that the diagnosis of the cases in which there is but little to be felt in the pelvis is difficult, and such cases are likely to be mistaken for cases of so-called ovaritis and for cases in which the ovaries are tender owing to some anemic or other condition of the system. Neurotic women and anemic girls frequently suffer from this ovarian tenderness. Such tenderness exists without the presence of any actual disease, and these cases should never be operated upon. If they are observed closely for a time no acceleration of pulse or rise in temperature will be noticed. The pus tube may be mistaken for a fibroid, as has happened to the author himself. During the development of pus tubes patients are usually supposed to be suffering from typhoid or malarial fever. The diagnosis in such cases should be made by the expert finger in the vagina. This shows the importance of the vaginal examination in all cases of prolonged fever. While many cases of disease of the uterus and appendages do get well without operative interference, in those cases that suffer from relapses nothing will relieve them but the removal of the tubes and ovaries. In cases suffering from large pus tubes cure is dependent on the removal of such tubes. The drainage of pus tubes the author regards as bad practice. What applies to the pus tubes applies equally well to the septic hematoma of the ovary and ovarian abscess. The author asserts that for pus tubes interfering with health and causing recurrent attacks of inflammation there is but one treatment, namely, removal by surgical means, and the patients do not become unsexed.

When inflammation of the uterine appendages kills it does so for want of operation, but it kills slowly and before producing death causes an enormous amount of suffering. A condition of chronic septicemia sets in, the patient becomes emaciated and confined to bed, bedsores form and she slowly but surely dies.

The subject of treatment is discussed by Marcus Rosenwasser, M.D., of Cleveland, Ohio. This he divides into the treatment of acute and chronic peritonitis, medical and surgical. The removal of the immediate cause, the cleansing of the parts, free purgation, rest in the horizontal position, with hot fomentation or ice-bag to the hypogastrium, are the essential features of the medical treatment of acute peritonitis. Stimulants and strychnia may be needed if the pulse is rapid and weak. Some cases, especially neurotics, require opiates from time to time for the relief of pain, which are best given by suppository or subcutaneously. Opiates should be used sparingly and should be early discontinued. Hot vaginal douches may be used if well borne, not otherwise. Small blisters to the inguinal regions are of no value. Frequent repetition of saline laxatives is followed by relief of pain. The bromides serve a good purpose in allaying reflex nervous manifestations. The giving of iodides and mercurials with the idea of dissolving exudates is decidedly wrong, since the plastic material is thrown out by nature as a bulwark against general peritoneal invasion.

In regard to the surgical treatment, curetting and free drainage of the uterine cavity before infection has spread to the tubes or beyond will in many cases limit or abort the inflammation within the uterus. But when the appendages have been drawn into the inflamed area, the procedure is of questionable utility and is often harmful.

Abdominal section is called for when symptoms point to the formation of abscess either within a pelvic organ or within a circumscribed space in the pelvic cavity. Should such abscess rupture, section is indicated if it can be performed immediately or within the first few hours before general inflammation has developed. In the latter event the results are not encouraging. After general peritonitis has set in, with a small and rapid pulse, vomiting and increasing tympanites, the author inclines to active stimulation and the pushing of strychina to the point of toleration rather than operative interference.

In the chronic pelvic peritonitis the medical treatment consists in rest in bed with attention to the bowels, to feeding and to hygiene. Boroglyceride or ichthyol tampons of lamb's wool, by supporting the pelvic diaphragm and depleting the blood-vessels, hasten recovery in some cases. Gentle pelvic massage may be of value in softening adhesions and may thus aid in the reposition of fixed organs. Local electricity may be of temporary benefit. As a resolvent of exudates it has proven a failure in the author's hands after repeated and patient trial.

While curetting, when carefully done, may be of benefit in some cases, abdominal section is the recognized surgical treatment for suppurating appendages. The uterus should be removed if it is also infected or honeycombed with pus. The sinuses and fistulæ that remain after the discharge of so-called pelvic abscesses and resist efforts to cure by drainage and injection of irritants may be cured by removing the cause, located in the remnants of suppurating tube and ovary.

The treatment of inflammation of the uterus and appendages is also discussed by A. Vander Veer, M.D., of Albany, N. Y., who agrees very closely with Dr. Rosenwasser. J. Henry Carstens, M.D., of Detroit, Mich., contributes further remarks on the treatment, and urges that a microscopical examination be made in every case of leucorrhœa with burning micturition of sudden onset, to determine whether of gonorrhœal origin or not. If gonorrhœal, it should be treated not by douches but by thoroughly cleaning out the vagina, the uterus and cervix and applying iodine, corrosive sublimate and other germicides thoroughly and effectively.

After abortion the author believes in cleaning out the cavity of the uterus with a dull curette and applying pure carbolic acid. The author sums up his paper as follows:

1. Let the general practitioner most conscientiously and carefully treat gonorrhœal infection in women.

2. Let the family physician and obstetrician most carefully manage confinements aseptically, and in the treatment of miscarriages be most thorough and not trust the *vis medicatrix naturæ*, but carefully clean out the uterine cavity.

3. Girls or young women who have leucorrhœa and pelvic pain, the result of accident or not, should be most carefully and early treated before mischief has been done.

4. In cases of acute inflammation judge each case by itself. If the symptoms are mild palliative treatment with absolute rest will be proper, and an operation can be performed later.

5. Cases of six or eight weeks' standing with sepsis should be operated on promptly.

6. When operating try and remove all diseased tissues if you expect your patients to get well promptly and perfectly. If you cannot and a second operation is necessary, tell your patient or the friends immediately, otherwise you will bring abdominal surgery into bad repute.

The remaining paper of the group, "Various Modes of Treatment," by Joseph Price, M.D., of Philadelphia, appeared in the issue of THE MEDICAL AND SURGICAL REPORTER for November 24th, page 709.

Francis Foerster, M.D., Professor of the Diseases of Women to the New York Post-Graduate Medical School and Hospital, etc., continues his articles on the

Comparative Microscopical Studies of the Ovary,

this paper being concerned with the stroma of the ovary. As the result of his studies he lays down the following corollaries:

1. In accord with W. His and others, the ovary must be considered an erectile organ in whose cortex the smooth muscle fibers largely predominate over the connective tissue.

2. The medulla of the ovary is mainly composed of fibrous connective tissue holding comparatively few bundles of smooth muscle fibers.

3. In the cortex of the human ovary the bundles of smooth muscle fibers interlace in an almost vertical sagittal and frontal direction.

4. In the cortex of the ovary of the guinea-pig the smooth muscles exhibit a plexiform arrangement, also to be seen in the ovary of the cat and ewe.

5. The arteries of the medulla of the human ovary have a markedly tortuous course. Their muscle coat is liable to a hyaline infiltration and to endarteritis obliterans.

6. In the medulla of the ovary of the cow, the ewe and the sow peculiar vascular tufts are invariably met with, consisting of arteries, veins and capillaries whose walls are changed into myxomatous tissue.

7. Within such vascular tufts almost always an effusion of serum or lymph is met with, often to a considerable extent. These effusions are probably due to a rupture of lymphatics occurring by the methods of slaughtering the animals.

8. The arteries, and probably also the veins, in the medulla of the ovary of the cow, ewe and sow are frequently found changed to a myxomatous tissue either holding trabeculæ of muscle fibers or consisting of purely myxomatous tissue. This change not infrequently leads to an obliteration of the blood-vessels named.

J. F. W. Ross, M.D., of Toronto, Can., contributes an article entitled

Personal Experience With Pus Tubes.

He states that he has met with four varie-

ties, namely, intratubal abscess, intraovarian abscess, intraligamentous abscess, and extraperitoneal abscess (that is, an abscess entirely outside the tissues forming the pelvic contents). The latter variety may be cured by puncture and drainage. The third variety, or intraligamentous abscess, must be opened and drained, but if accompanied by a pus tube that is not removed the abscess may remain uncured until the pus tube is removed. The second variety will occasionally cure itself by perforating downward and discharging its contents, but the patient will not remain well while the contracted and disorganized ovary is left in situ. The intratubal abscess should always be treated by removal of the tube.

In looking back over his records, the author finds that the fatal cases were chiefly those in which gonorrhœa was contracted but a short time previous to operation, and he believes that it is not wise to operate on these cases too soon after the primary infection. It is better to wait till the pus has become to a certain extent sterile and until the poisonous germ has become attenuated. The author is also firmly convinced that none but those who have had the advantage of a special training in this department of surgery should undertake the operations for the relief of the cases under discussion.

The author is a firm believer in the efficacy of the drainage tube, and it is his practice to leave it in for a period of about eight days, at the end of which time it is replaced by a rubber tube. He thinks that the danger of infection of the peritoneum through the drainage tube is a myth if the tube is properly cared for. Moreover, he does not think that the recent suggestions to examine the pus from a pus tube or suppurating ovary microscopically and judge from the result of the necessity for drainage is practicable in the work of a majority of operators, and he therefore thinks it best to adopt drainage in all doubtful cases.

Flushing, to be of any service, must be thorough, and a large quantity of water must be used. Such a stream of water should be used as will float out clots and pieces of *debris* as well as remove pus.

The ligation of the pedicle is a matter of great importance, and the author does not approve of curetting the stump of the tube to remove all diseased tissues. By so doing the stump is made conical and there is greater opportunity for the ligature to slip. The tissue of a pus tube, like the tissue of a fibroid, has a tendency to shrink; the ligatures should therefore be applied very tightly.

The author suggests that a drainage tube be passed into the bottom of the pelvis during the interval of time that is occupied by passing the sutures, as in this way the amount of hemorrhage can be determined and steps taken to arrest it if excessive.

Appended to the paper is a table of the results of seventy-four operations.

The Present Status of the Treatment of Pelvic Inflammation

is the title of a paper by Walter B. Dorsett, M.D., Professor of Obstetrics, Beaumont Hospital Medical College, St. Louis, Mo. The following are his deductions, which are in marked contrast to the opinions of the writer of the previous article:

1. Pus in quantities is hard to deal with down in the pelvis in laparotomy cases, and if possible should be evacuated prior to taking out the tubes and ovaries, either through the *cul-de-sac* of Douglas or, if between the layers of the broad ligament at the side of the uterus, do your laparotomy at some future time.

2. Pus sacs in the tube near the uterine end of the tube can be evacuated through the uterus by packing the horn.

3. Parametritis, or cellulitis of the ancients, is, except in rare instances, a secondary trouble, due to a foul uterine cavity. Clean out the cavity and stop the source of poin poison, and you do the best thing possible to be done.

The remaining papers in this issue are "Total Extirpation by the Vagina for Lesions of the Uterine Appendages," by Charles Jacobs, M.D., of Brussels, Belgium, in which the procedure is strongly advocated; "Treatment of Distention of the Fallopian Tubes without Laparotomy and Removal," by Frank A. Glascow, A.B., M.D., Professor of Clinical Gynecology, St. Louis Medical College, in which the author advises dilatation of the uterus (by means of sterilized slippery-elm tents) which is kept up for several days, at the end of which time there is usually a discharge of pus and relief of symptoms. If, when the uterine canal is large enough to admit the finger, there is no discharge of pus, the author anesthetizes the patient and curettes the uterus. The author reports two cases relieved in this manner and one in which relief did not follow and where he was obliged to open the abscess, which was in the ligament.

Chloral Hydrate for Scarlet Fever.

Dr. James C. Wilson, in a paper read before the Pan-American Medical Congress, gave as his experience that chloral in doses of two or three grains in a teaspoonful of sirup every three or four hours exercises a powerful influence in this disease. Given thus it is to a high degree diuretic, controls the nervous symptoms, and to some extent antiseptic and tends to diminish blood pressure and lower the temperature. He has employed it for over ten years with more satisfactory results than from any other method of treatment.—*Phila. Polyclinic.*

Permanganate of Potash as an Antidote to the Cyanides.

Dr. J. V. Kossa, from experiments on animals, claims that the permanganate of potash is an efficient antidote to hydrocianic acid and the cyanides. A dose of over ten times greater than the fatal one was given to rabbits and immediately followed by the permanganate; no symptoms of poisoning followed. The potash salt oxidizes the poisonous compounds into innocuous preparations

PERISCOPE.

IN CHARGE OF WM. E. PARKE, A.M., M.D.

MEDICINE.

Value of Opium in the Laryngeal Stenoses of Children.

Dr. Carl Stern (*Ther. Monat.*) recalls the well-known fact that the difficulty in breathing in stenosis of the larynx in children is greatly aggravated by sleeplessness and fright. For this reason he has been led to treat these cases with opium, and his results have been so gratifying that he believes the remedy should receive more extensive employment. He uses it in cases—whether in diphtheria or without existing throat affection—in which the hoarseness, the barking cough, the stridor, the cyanosis, and finally the sucking in of the xiphoid process and lateral portions of the thorax point unmistakably to stenosis of the larynx. He reports several cases in which the use of opium averted an apparently necessary tracheotomy. Stern gives from two to five drops of the tincture of opium, according to the age of the child and the intensity of the symptoms, the dose being renewed according to the result obtained.

Relapses in Typhoid Fever.

Dr. Hugh U. Stewart contributes an instructive paper on this subject to the *Practitioner*. The writer defines a relapse as a second attack of typhoid fever, with a repetition of all the phenomena of the first illness, occurring in a patient who has become or is just becoming convalescent from the primary attack. The clinical history of 50 consecutive cases collected from the records of Guy's Hospital showed that men were especially liable to relapses, 31 of the patients being males and only 19 females. Age appears to have no special influence, relapses simply occurring most often at that period of life at which typhoid fever is most common.

The interval of apyrexia between the primary attack and the relapse was, in the majority of cases, from five to eight days; but it may vary from one up to twenty-four days. In cases in which there were two relapses, the usual interval between the first and second relapse was at least double that between the first attack and the first relapse. The relapse is nearly always of shorter duration than the primary attack; and in cases with two relapses the second was never as long as the first.

Perhaps the most important clinical feature in these cases was the state of the bowels. Constipation was present in 62 per cent., the bowels were regular in 20 per cent., leaving only 18 per cent. in which there was more or less diarrhœa. These figures seem to justify the view that constipation has an important relation to the occurrence of relapses.

In order to study the pathology of relapses, Dr. Stewart collected 40 fatal cases from various sources. These cases show, without a doubt, that there is an important difference in the seat of ulceration in primary attacks and in relapses. In 34 of these 40 cases, or 85 per cent., the large intestine contained recent ulcers and the small intestine contained healed ulcers; while in 65 cases of single attacks collected for comparison, 48, or 75 per cent, had the large intestine quite healthy, but the small intestine showed recent ulcerations. The author therefore holds that a relapse is due to a reinfection of the large intestine by sloughs derived from some part of the small intestine above.

It is generally agreed that a fatal termination to a relapse of typhoid fever is very rare. This is easily explained, according to Dr. Stewart, when we remember, first, that the relapse, owing to the acquired partial immunity, is not so severe as the primary attack, and, secondly, that the large intestine, which is the chief seat of ulceration in relapse, is thicker than the small. Thus the very important danger of perforation is to a large extent removed in a relapse, and we find accordingly that the prognosis, far from being worse, is considerably better than that of a single attack.

Medical Antisepsis.

M. Petresco, of Bucharest (*Gaz. des Hop.*), reports results which he has obtained by medical antisepsis which he has largely used as a therapeutic measure. He has employed nearly all the antiseptics in use. His conclusions are as follows:

1. A local medical or general antisepsis at a distance on the histological elements and on the pathogenic germs or on their toxines can be obtained which is analogous to local surgical antisepsis.

2. There are several chemical substances (fixed or volatile) which upon absorption can, even in remote parts, kill or attenuate certain pathogenic micro-organisms.

3. There are some medicaments which neutralize or modify chemically the toxines of pathogenic germs

4. The best therapeutic agents to produce medical antisepsis are the products, more or less condensed, of the aromatic series, such as the essences. The essences are the antiseptics *par excellence* as much in medicine as in surgery. It is by the essences or their vapors that impregnation is obtained, a modification, more or less profound, of the organism, and in consequence a medical immunity. There is created a medical sterilization of the interior tissues analogous to the sterilization *in vitro* in a culture. By this sterilization or antisepsis of the interior microbe or ptomaine, auto-intoxication is prevented in sufferers from contagious diseases.

5. Medical antisepsis should be utilized in nearly all internal diseases of a microbic nature, as it has been utilized in the external parasitic diseases.

6. To establish the basis of medical antisepsis we must have a therapeusis which will act as a microbocide or destroy toxines or ptomaines.

A Cause for Baldness.

Dyspepsia is not only one of the most common diseases, but it is also one of the most common causes for the loss of hair. Nature is very careful to guard and protect and supply the vital organs with the proper amount of nutriment, but when she cannot command a sufficient quantity of blood supply for all the organs she very naturally cuts off the supply of parts the least vital, like the hair and nails, so that the most important organs, like the heart, lungs, etc., may be better nourished and perform their work more satisfactory. In cases of severe fevers one can readily see how nature economizes. If one will examine a hair very closely from the beard or head it will be seen that it gives somewhat of a history of an individual during the time it was growing. It will be observed that it shows attenuated places, showing that at some period of its growth the blood supply was deficient from overwork, anxiety or under-feeding. Speaking of dyspepsia being one of the most common causes of alopecia, I will add that a very common cause of indigestion is irregularity of meal-hours. The human system seems to form habits, and it performs its functions to a great measure in accordance with the habits formed. This seems to be particularly so in regard to eating, and you might say drinking too. Your stomach gets into the habit of accepting your meals at a certain hour every day, and at that hour it is ready for it. If you, however, take meals at irregular hours you take your stomach by surprise, and it does not know when to expect a meal, and it is not in that state of readiness for prompt and perfect performance of its work. Be more careful about what you eat, when you eat it, and you will have less dyspepsia and fewer bald heads.—*Ed. Charlotte Med. Jour.*

Malignant Lentigo in the Aged.

Hutchinson describes a singular affection, malignant lentigo, which begins as a brownish or black spot and which ends in the production of malignant tumor. The disease begins spontaneously or follows a lesion of the skin. In the four cases reported by Dubreuihl it was situated on the left side at the upper part of the cheek, on the eyelid, or even on the conjunctiva.

It occurs as a simple pigmentation without projection or thickening of the skin, and forms an irregular spot varying from sepia brown to black in color. It persists for ten to twenty years, remaining absolutely stationary or varying in tint, extent, sometimes disappearing, leaving the skin absolutely normal. At a given moment there appears on the spot or in its vicinity a malignant, ulcerating tumor, vegetating, bleeding, rapidly increasing in size—sometimes melanotic. It is recurrent, either at the same place or in the ganglions, presenting at each recurrence more malignancy and becoming melanotic. Histologically it resembles melanotic cancer, built up of large epithelioid cells, loosely connected, without stroma, and infiltrating its surroundings.—*Times and Register.*

Ringworm of the Scalp.

Hartzell (*Arch. of Ped.*) has the hair cut short and the following ointment rubbed into the diseased portions of the scalp once a day with considerable friction; Beta naphthol, 1 dram; petrolatum, 7 drams. In addition, the entire scalp is thoroughly washed every second day with hot water and a superfatted soap containing sulphur and salycilic acid. Unless the applications are well rubbed in to the hair follicles good results are not to be hoped for, and the treatment should be continued some time after apparent recovery.

Strychnia in Obstetrics Practice.

Duff (*Jour. of the Am. Med. Ass'n*) advises the use of strychnia in doses of one-sixtieth to one-thirtieth of a grain three times daily during the latter part of pregnancy, and believes by following this practice that the indications for instrumental delivery are less frequent, and ergot will only occasionally be called for during or after the third stage of labor. He does not offer this as a routine treatment, but as indicated in a large number of cases.

Apomorphine as an Expectorant.

Carmichael (*Cin. Lancet-Clinic*) says of this drug: "As an expectorant, in doses ranging from one-twentieth to one-sixtieth of a grain, great relief may be obtained in cases of bronchitis, trachitis and catarrhal pneumonia. From the fact that it produces emesis by its action through the spinal nerve centers, and not by irritation of the mucous membrane, it is a preferable remedy where we have inflammatory conditions of the stomach and emetics are indicated."

Whooping-Cough Cut Short.

The *Illustrated Medical Journal* says Dr. Moncoro treats pertussis with a 10 per cent. solution of resorcin, applying the solution every two hours to periglotteal region with a brush. Application is made four or five times at each sitting. The theory is that the disease is due to micro-organisms and affects primarily the larynx. Cultures of the micro-organisms have been destroyed by the smallest amount of resorcin.

Cold Water as an Antipyretic.

Dr. Fisher has arrived at the following conclusions:

1. That cold water is the best antipyretic used to-day.

2. That it is easily obtainable and is therefore adapted to all classes of cases, both rich and poor.
3. The mode of application is so simple that it adapts itself to the hospital and equally as well to private practice, and can be applied without any distinct training.
4. Cautiously given it stimulates.
5. Carelessly used and longer than required it depresses and will produce subnormal temperature.
6. That rectal temperature should be taken and the bath at once discontinued when temperature falls to 101°, as it will then continue to fall.
7. That a stimulant administered before the bath may be necessary and should be given where there is a feeble heart.
8. That the temperature indicates when to commence and when also to discontinue the hydropathic treatment.
9. Unnecessary blanketing after a bath is injurious and will produce copious perspiration, which I believe weakens the patient.
10. The temperature of the room should always be between 68° and 72°.—*Post-Graduate.*

The Cold Poultice as an Antipyretic in High Grades of Fever.

Bedford Brown, of Alexandria, Va., has used the cold poultice in his practice for the past fifteen years, with much satisfaction to himself and infinite comfort to his patients. He finds it to possess many advantages over the coal-tar antipyretics, as it never depresses the action of the heart or nervous system, but accomplishes its work speedily, easily, pleasantly, with comfort to the patient. His method of preparing the poultice is as follows: A sufficient quantity of flaxseed meal to prepare a poultice of suitable dimensions is placed in a common earthen bowl, and over this is poured boiling water, while the meal is constantly stirred with a large spoon until cooked to the consistency of soft mush. This material is then spread on a piece of soft cotton cloth, for an adult, about eighteen inches long and twelve or fourteen wide, or sufficiently long to cover the entire abdomen from the pubis upward, extending at least over half of the chest, well over the cardiac region, so as to fully cover the heart and half of the chest. This poultice is now covered with another piece of cotton of corresponding dimensions. After being spread and covered, the entire surface to be applied to the person is frequently besprinkled with ice-water until its temperature goes down to 68° or 70° F. (20° or 21.1° C.), when it is ready for application. At this point I would suggest that the poultice be not spread too thick, as in that case it would prove oppressive to the patient. The poultice thus prepared is applied over the chest from above the cardiac region to the pubis. In pneumonia of violent type, with an unyielding temperature of 104° or 105° F. (40° or 40.6° C.), frequent, hard, wiry pulse, great frequency and oppression of respiration, Dr. Brown has seen a cold poultice applied over the entire chest, extending back well over the sides, accomplish more in the reduction of temperature, of frequency of cardiac action and respiration, than all other local agents combined. If necessary the poultice should be renewed until the temperature falls to normal.—*Virginia Med. Monthly.*

A Case of Leucocythæmia Apparently Cured by Bone-Marrow.

Dr. W. G. Bigger reports a lad, aged twelve years, who for the previous six years had been under observation, suffering from splenic enlargement with anæmic symptoms, but who had previously been much relieved by treatment with arsenic and iron. Two months ago the disease acquired a more active character. The spleen became much larger and completely filled the left half of the abdomen, while at the same time there were diarrhœa, pyrexia and frequent attacks of epistaxis. He was now fed on raw bone-marrow spread on thin slices of bread. Under this treatment the improvement in the boy's condition, after the first week, was marvelous. The spleen diminished in size and the anæmia rapidly decreased. After a month's treatment the boy was reported as being better than ever before, while the spleen had receded and was at that time only felt about three inches below the ribs.

Treatment of Apparent Death by Rhythmical Traction Upon the Tongue.

The first case in which rhythmical traction of the tongue was employed at Paris to produce artificial respiration was by M. Lapicida (*La Tribune Medicale*), aided by a student.

A young woman, wishing to commit suicide, sprang into the Seine. She was seen by two sailors, who went to her rescue; after remaining for five minutes submerged, she was finally withdrawn from the river. Taken at once to the station, frictions were applied, but without success, when M. Lapicida, following the method of Laborde, began rhythmical tractions of the tongue.

At the end of five minutes a slight blowing sound was heard and respirations were established. At the same time the patient experienced a nervous crisis and objected to being resuscitated. She was placed in bed and enveloped in warm clothing. A few moments afterward she vomited freely and all danger was over.

Lapicida, who is chief of the post of the life-saving society, expressed himself as amazed at the rapidity with which the respiratory functions were restored, and resolved to employ this method in all cases which came under his care in the future.

Notices detailing the method of Laborde have been placed in the life-saving stations throughout Paris.

The Treatment of Tapeworm.

Dr. Leslie Ogilvie attributes the frequent failures in the attempt to remove a tapeworm

to a lack of attention to details in the administration of the drug used. When the purgative is given soon after the anthelmintic the worm is carried away, all but the head. In such cases it is useless to repeat the drug, as is frequently done, in a short time, as the worm offers but scanty absorbing surface and the chief effect of the drug is to poison the patient. Neither does he consider castor oil a suitable purgative to give before the administration of the anthelmintic, as there is in all probability a considerable coating of mucus about the worm which the oil does not remove. Sulphate of magnesia with tincture of jalap he considers the most efficacious preliminary purgative. He conducts his case as follows, and reports 13 consecutive cases successfully treated, 10 of which had been previously treated without result. The patient should eat less than usual for a few days before treatment, and the day before should be restricted to a milk diet with a little stimulant. At bedtime a purgative draught of sulphate of magnesia and tincture of jalap is given, and repeated at 7 the next morning if the first dose has not operated. At 8 A.M. a drachm of fluid extract of male fern is given, and at 9 o'clock a second dose. At 11 o'clock a dose of castor oil is administered; even if the worm has been passed previously, it is well to give the oil to remove any of the poison which may be left. The physician should pay a visit soon after the second dose of male fern has been given, not only to observe the patient, but to inspect all the motions, each one of which should be passed into a separate utensil. In searching for the head it is convenient and less unpleasant to use a dilute solution of permanganate of potash as a disinfectant with which to separate the worm from the feces.—*Boston Med. and Surg. Jour.*

Malarial Organisms in Enteric Fever.

After a short review of the relations existing between typhoid fever and malarial fever, and also a reference to the Woodward theory that the simultaneous presence of the typhoid-fever and the malarial-fever poisons produces a third independent or hybrid affection, called "typho-malaria," W. Gilman Thompson, of New York City, presents a detailed report of three carefully studied cases of typhoid fever, in two of which the malarial body was found and the third contained abundant malarial pigment granules. In the first case reported the plasmodium became active during the course of the disease, while in the second and third cases the malarial organism remained latent until the force of the enteric infection had been nearly expended. These cases distinctly prove that both typhoid and malarial fever may exist simultaneously, a fact that has been disbelieved by many good observers. It is also clear from the evidence presented that the combination of these two poisons does not produce a third definite disease, but that each process goes on side by side. In two of the cases the malarial poison was late it until the resistance of the body had been reduced by the typhoid poison.—*Amer. Jour. of the Med. Sci.*

DR. CHARLES HENRY BROWN, of New York, editor of the *Journal of Nervous and Mental Diseases*, says: "Where maltine with coca wine has served me best has been in cases of neurasthenia from any causes whatever. It certainly serves as a most excellent sustainer and bracer. Besides these two most necessary qualities, we are forced to believe in another in this combination, and that is the composing sedative or soothing quality which makes it a most valuable therapeutic desideratum. It does not seem to me that this sedative action depends entirely upon the coca or coca in combination with the wine. There is a conviction in my mind that maltine plays a very leading sedative part in this triple alliance."

ARMY AND NAVY.

CHANGES IN THE U. S. ARMY FROM DECEMBER 2, 1894, TO DECEMBER 15, 1894.

Leave of absence for four months on surgeon's certificate of disability, with permission to leave the Department of Dakota, is granted First Lieutenant Alexander S. Porter, Assistant Surgeon.

Leave of absence for four months, to take effect on or about January 20, 1895, with authority to go beyond the sea, is granted Captain Walter D. McCaw, Assistant Surgeon.

The leave of absence granted Captain Eugene L. Swift, Assistant Surgeon, is further extended two months.

First Lieutenant Charles E. B. Flagg, Assistant Surgeon, now on duty at Angel Island, Cal., will report in person at Fort Townsend, Washington, for temporary duty at that post.

Captain Euclid B. Frick, Assistant Surgeon, is granted leave of absence for four months.

First Lieutenant Madison M. Brewer, Assistant Surgeon, upon the expiration of his present leave of absence, will be relieved from duty at Fort Riley, Kansas, and will report for duty at Fort Keogh, Montana.

NEWS AND MISCELLANY.

Reduced Rates for Christmas and New Year's.

The B. & O. R. R. Co. announces that excursion tickets will be sold between all stations on its lines east of the Ohio River during Christmas and New Year holidays, at reduced rates, for all trains December 22, 23, 24, 25, 29, 30, 31, and January 1, 1895, valid for return passage until January 3, 1895, inclusive.—3t